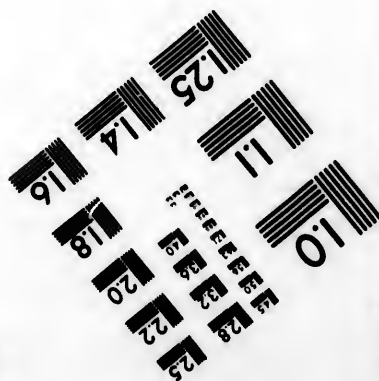
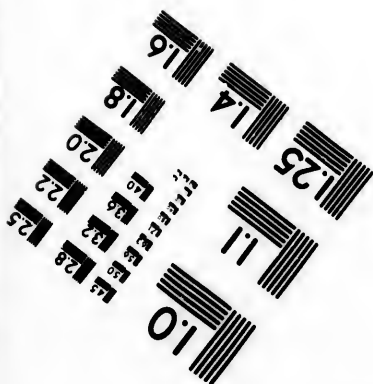
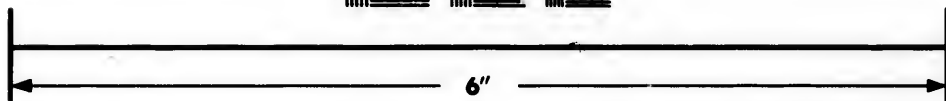
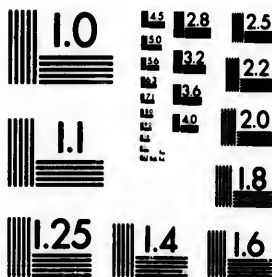


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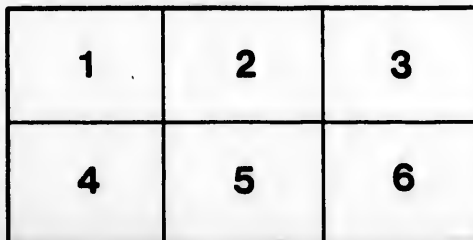
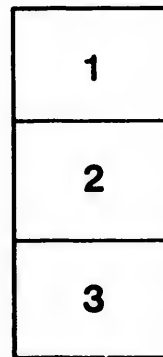
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OBSERVATIONS

MADE AT THE

MAGNETICAL AND METEOROLOGICAL  
OBSERVATORY

AT

TORONTO IN CANADA.

PRINTED BY ORDER OF HER MAJESTY'S GOVERNMENT,

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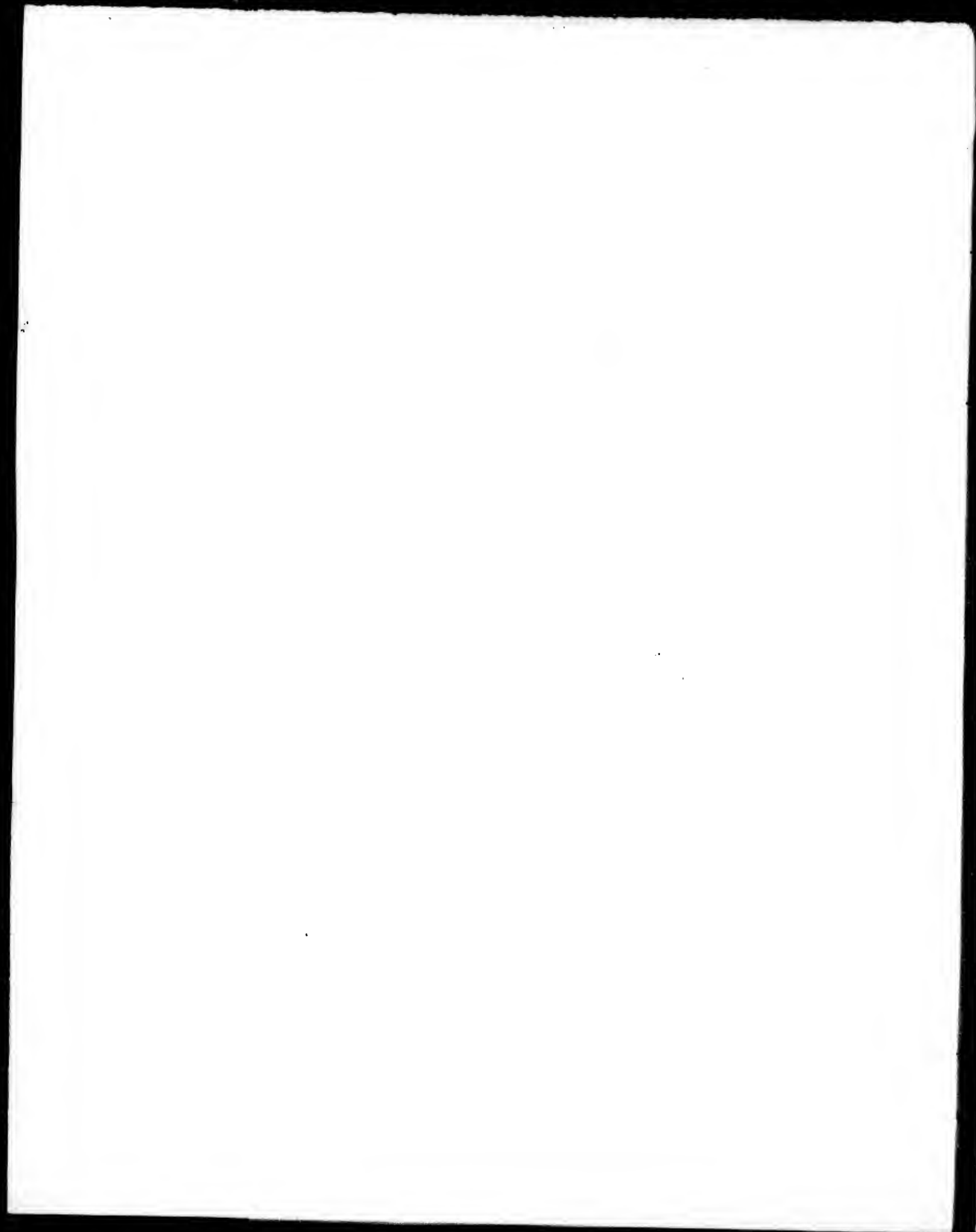
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1857.





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## INTRODUCTION.

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It has been suggested to me that the time is arrived when a brief review of what the Colonial Magnetic Observatories have accomplished may be desirable, showing—primarily, how far they have successfully carried out the instructions originally drawn up for their guidance by the Committee of Physics of the Royal Society (and approved by the President and Council of that body); and, collaterally, how a similar organization may be made available for the further prosecution of the objects for which the Colonial Observatories were established.

The magnetic investigations designed to be carried into execution by the Colonial Observatories embraced a much wider scope than had been contemplated by any previous institutions, or than had been provided for by the arrangements or instrumental means of any then existing establishment, whether national or private. Not, as previously, limited to observations of a single element (the Declination),—or combining at the most one only of the components of the Magnetic Force,—the instructions of the Royal Society, and the instrumental means prepared under its direction, provided for the examination, in every branch of detail, of each of the three elements which, taken in combination, represent, not partially but completely, the whole of the magnetic affections experienced at the surface of the globe, classed under the several heads of absolute values, secular changes, and variations: either periodical or occasional,—and proceeding from causes either internal or external. To meet the requirements of inductive reasoning, it was needful that the results to be obtained should comprehend all particulars under these several heads attainable by an experimental inquiry of limited duration. That no uncertainty might exist as to the objects to which, in so novel an undertaking, attention was to be directed, the Report of the Committee, approved and adopted by the President and Council of the Royal Society, conveyed in a very few sentences, remarkable alike for their comprehensiveness and conciseness, the desiderata of magnetical science. It may be convenient to reproduce these, when desiring to show the degree in which the Observatories have fulfilled their contemplated purposes:—“The observations will naturally refer

“ themselves to two chief branches, into which the science of terrestrial magnetism in its present state may be divided. The first comprehends the actual distribution of the magnetic influence over the globe, at the present epoch, in its mean or average state, when the effects of temporary fluctuations are either neglected, or eliminated by extending the observations over a sufficient time to neutralize their effects. The other comprises the history of all that is not permanent in the phenomena, whether it appear in the form of momentary, daily, monthly, or annual change and restoration, or in progressive changes not compensated by counter-changes, but going on continually accumulating in one direction, so as in the course of many years to alter the mean amount of the quantities observed.”—(Report of the Committee of Physics, pp. 1 and 2.)

With reference to the first of these two branches, viz. the actual distribution of the magnetic influence over the globe at the present epoch, the Report goes on to state:—“The three elements, viz. the horizontal direction, the dip, and the intensity of the Magnetic Force, require to be precisely ascertained before the magnetic state of any given station on the globe can be said to be fully determined . . . . and as all these elements are at each point now ascertained to be in a constant state of fluctuation, and affected by transient and irregular changes, the investigation of the laws, extent, and mutual relations of these changes is now become essential to the successful prosecution of magnetic discovery.”

With reference to the second branch, viz. “the secular and periodical variations,” it is observed, that “the progressive and periodical being mixed up with the transitory changes, it is impossible to separate them so as to obtain a correct knowledge and analysis of the former, without taking express account of and eliminating the latter;” and with reference to the secular changes in particular, it is remarked, “These cannot be concluded from comparatively short series of observations, without giving to those observations extreme nicety, so as to determine with perfect precision the mean state of the elements at the two extremes of the period embraced, which, as already observed, presupposes a knowledge of the casual deviations.”

It is clear from these extracts, that in the discussion of the observations the first point to be attended to, in the order of time, ought to be an investigation into “the laws, extent, and mutual relations of the transient and” (as they were called at the time the Report was written) “irregular changes,” as a preliminary step to the elimination of their influence on the observations from which a correct knowledge and analysis of the progressive and periodical changes were to be obtained. It will be

proper to show, therefore, in the first place, what the Observatories have accomplished in regard to the so-called casual or transitory variations.

*Casual Variations.*—All that was known regarding these phenomena at the period when the Report of the Committee of Physics was written, was, that there occurred occasionally, and, as it was supposed, irregularly, disturbances in the horizontal direction of the needle, which were known to prevail, with an accord which it was impossible to ascribe to accident, *simultaneously* over considerable spaces of the earth's surface, and were believed to be in some unknown manner connected, either as cause or effect, with the appearances of the aurora borealis. The chief feature by which the presence of a disturbance of this class could be recognized at any instant of observation,—or by which its existence might be subsequently inferred independently of concert or comparison with other Observatories,—appeared to be the deflection of the needle from its usual or normal position to an amount much exceeding what might reasonably be attributed to irregularities in the ordinary periodical fluctuations. The observations which had been made on the disturbances anterior to the institution of the Colonial Observatories had been chiefly confined to the Declination. A few of the German Observatories had recently begun to note the disturbances of the Horizontal Force, but as yet no conclusions whatsoever as to their laws had been obtained;—in the words of the Committee's Report, the disturbances “apparently observe no law.”—(Report, p. 10.) By the instructions cited above, the field of research was enlarged, being made to comprehend the disturbance-phenomena of the *three* elements; and the importance of their examination was urged, not alone as a means of eliminating their influence on the periodic and progressive changes, but also on the independent ground that “the theory of the transitory changes might prove itself one of the most interesting and important points to which the attention of magnetic inquirers can be turned, as they are no doubt intimately connected with the general causes of terrestrial magnetism, and will probably lead us to a much more perfect knowledge of those causes than we now possess.”

The feature which has been referred to as furnishing the principal if not the only certain characteristic of a disturbance of this class, namely, the *magnitude* of the departure from the usual or normal state at the instant of observation, has, in the discussion of the observations, been made available for the object at present under notice; it has afforded the means of recognizing and separating from the entire mass of hourly observations, taken during several years, a sufficient body of observations to furnish the necessary data for investigating at three points of the earth's surface—one in the

temperate zone of the northern hemisphere, a second in the temperate zone of the southern hemisphere, and a third in the tropics—the laws or conditions regulating or determining the occurrence of the magnetic disturbances. The method by which this separation has been effected has been explained on several recent occasions, and will be found fully described in pp. viii, ix, and x of the present volume, when treating of the disturbances of the Horizontal Force at Toronto. By processes of a similar description, the disturbances of principal magnitude in each of the three elements, the Declination, Inclination, and Total Force, have been separated from the other observations at the three Observatories of Toronto, Hobarton, and St. Helena, and submitted to an analysis, of which the full particulars as regards the Toronto observations are contained in the present volume, as those of Hobarton and St. Helena will be in volumes which have yet to appear. By the adoption of a uniform magnitude as constituting a disturbance throughout the whole period comprised by the analysis, the amount of disturbance in the several years, months, and hours is rendered inter-comparable. The result of this investigation (which could not be otherwise than a very laborious operation, since the Toronto observations alone, for example, considerably exceeded 100,000 in number, each of which had to be passed through several distinct processes), has made known to us that this class of phenomena, which may with propriety and advantage receive in future the appellation of *occasional*, are, in their mean or average effects, subject to periodical laws of a very systematic character, placing them, as a first step towards an acquaintance with their physical causes, in immediate connection with the *Sun* as their primary exciting cause. They have, 1°, a *diurnal* variation which follows the order of the solar hours, and manifests, therefore, its relation to the sun's position as affected by the earth's rotation on its axis; 2°, an *annual* variation, connecting itself with the sun's position in regard to the ecliptic; and, 3°, a third variation, which seems to refer still more distinctly to the direct action of the sun, since both in period, and in epochs of maximum and minimum, it coincides with the remarkable solar period of about ten or eleven of our years, the existence of which has been recently made known to us by the phenomena of the solar spots; but which, as far as we yet know, is wholly unconnected with any thermic or physical variation of any description (except magnetic) at the surface of the earth, and equally so with any other cosmical phenomena with which we are acquainted. The discovery of a connection of this remarkable description, giving apparently to magnetism a much higher position in the scale of distinct natural forces than was previously assigned to it, may justly be claimed on the part of the Colonial Observatories, as the result of the system of observation enjoined (and so patiently and carefully maintained), and of the investigation for which it has supplied the data; since it was by means of the

disturbance-variations so determined, that the coincidence between the phenomena of the solar spots and the magnitude and frequency of magnetic disturbances was first perceived and announced.—(Phil. Trans. 1852, Art. viii.)

The extent and mutual relation of the disturbance-variations of the three elements, even at a single station (as is shown in the present volume for Toronto), supply a variety of points of approximation and of difference, which are well suited to elucidate the physical causes of these remarkable phenomena; but valuable as such aids may be when obtained for a single station, their value is greatly augmented when we are enabled to compare and combine the analogous phenomena as they present themselves at different points of the earth's surface. To give but a single example: there are certain variations produced by the mean effects of the disturbances which attain their maximum at Toronto during the hours of the night (pp. lix—lxi of this volume); the corresponding variations attain their maximum, at Hobarton, also during the hours of the night, but with a small systematic difference as to the precise hour, and with this distinguishing peculiarity, that the deflection at Hobarton is of the opposite pole of the needle (or of the same pole in the opposite direction) to the Toronto disturbance; whilst at a third station, St. Helena, which is a tropical one, the hours of principal disturbance are those, not of the night, but of the day. A very superficial examination is sufficient to show that for the generalisation of the facts,—a generalisation which is indispensable for their correct apprehension and employment in the formation of a theory,—the stations at which the phenomena are known must be increased. Those which were chosen for a first experiment were well selected to prove the importance of the investigation, and thus to lead to its extension. It is only at the Colonial Observatories that the disturbance-variations have hitherto been made out; and, guided by experience, we may infer that by adopting a similar organization and similar processes of observation at other stations, similar results may be expected, and the inquiry be further prosecuted.\*

\* The Colonial Observatories which were under my superintendence were originally four in number; viz. Toronto, St. Helena, Cape of Good Hope, and Hobarton. In July 1816 the detachment of the artillery at the Cape of Good Hope was withdrawn by orders from England, and the charge of the Magnetical and Meteorological Observations transferred to Mr. Maclear, the Government astronomer at that station. The Magnetical Observations made at the Cape, whilst the Magnetic Observatory was one of those which were under my superintendence, were published in 1851 in a volume similar to the present. Since the transfer to Mr. Maclear, Mr. Pierce Morton, a gentleman of considerable mathematical attainments, who has been added as an assistant to take charge, under Mr. Maclear, of that branch of the Cape Observatory, has applied himself to the investigation of the lunar magnetic influence (as derived from the Cape Observations), with a view of presenting the results to the Royal Society. For this and for other investigations into which he may desire to enter, he will have the entire series of observations, viz. those, as above stated, already published, and those which have been made since the transfer of the Observatory up to the present time.

*Periodical Variations.*—The anticipation expressed in the Report of the Committee of Physics, that, for the purpose of obtaining a correct knowledge of the “regular periodical variations,” it would be found necessary to eliminate the “casual perturbations,” has been fully confirmed. Had the latter been strictly “casual,” or accidental in a sense contra-distinguished from and opposed to periodical, a sufficiently extended continuance of observation might have occasioned their mutual compensation; but now that we have learned that the mean effects which they produce are governed by periodical laws, and that these laws and those of the regular periodical variations are dissimilar in their epochs, it is manifest that in their joint and undivided effects we have two variations, due to different causes and having distinct laws, superimposed upon each other; *to know the one correctly, we must necessarily therefore eliminate the other.* A striking illustration of the importance of such elimination is furnished by the solar-diurnal variation of the Total Force. It will readily be imagined that the question must be an important one, whether a variation which is supposed to derive its origin from the sun be a single or a double progression; whether it have two maxima and two minima in the 24 hours, or but one maximum and one minimum in that period. When no separation is made of the disturbances, the progression appears to be a double one, having two minima, one occurring in the day and the other in the night. With the removal of the disturbed observations the night-minimum disappears, and we learn that the regular solar-diurnal variation of the Total Force has but one notable inflection in the 24 hours; viz. that which takes place during the hours when the sun is above the horizon. The night-minimum is, in fact, the mean effect of the occasional disturbances (pp. xciii—xcv of this volume). It is probable that the nocturnal inflection of the solar-diurnal variation of the Declination may be ascribed to the same cause, namely, to the superposition of two distinct variations.

A careful analysis of the solar-diurnal variations of the Declination at the Colonial Observatories has brought to light the existence at all these stations of an annual inequality in the direction of the needle, concurrent with changes in the *sun's declination*, having its maxima (in opposite directions) when the sun is in or near the opposite solstices, and disappearing at or near the epochs of the equinoxes. An intercomparison of the results of the analysis at these stations has shown, that this inequality has the remarkable characteristic of having notably the same direction and amount in the southern as in the northern hemisphere, and in the tropical as in the temperate zones. An ingenious explanation of these phenomena has been suggested by Dr. Langberg of Christiania (Proceedings of the Royal Society, Vol. VII., p. 345); but whether this explanation be or be not the correct one, the

theoretical importance of the facts is considerable, inasmuch as they appear to be wholly irreconcilable with the hypothesis which would attribute the magnetic variations to thermic causation. We may ascribe to the general and almost exclusive prevalence of the thermic hypothesis, and to its influence on magnetic reasonings, that the well-known erroneous opinion was so confidently promulgated by a deservedly high magnetic authority,\* that a line *must* exist surrounding the globe in which the needle would be found to have *no diurnal variation*. We have now, on the contrary, reason to be assured by the facts above referred to that there is no such line, but that everywhere in the regions of its supposed existence a diurnal variation subsists, having opposite characteristics in opposite parts of the year, as influenced by the sun's position on either side of the equator, and disappearing only at the epochs when the sun passes from south to north or from north to south declination.

*Lunar Variation.*—But if thermic relations have failed to supply a connecting link between the sun and those magnetic variations which are, without doubt, referable to the sun as their primary cause, the failure of that hypothesis is made still more obvious by the existence of variations governed by the *moon's* position relatively to the place of observation. We are indebted to Mr. Kreil, now holding the same position in Austria that I have filled in England, for the first suggestion of the existence of a lunar-diurnal variation of one of the elements, viz. the Declination, founded on observations at Milan and Prague; and in the present volume, pp. lxxviii—lxxxvi, will be found a complete exposition of the facts of the moon's diurnal influence on all the three magnetic elements at Toronto, viz. on the Declination, Inclination, and Total Force. In the case of this investigation also, notwithstanding the smallness of the values concerned, the instrumental means supplied to the Colonial Observatories have been found competent to determine with an approximation sufficient for present theoretical purposes, the character and amount *for each element* of the regular daily effect of the moon on the terrestrial magnetic phenomena, the existence of which does not appear to have been even suspected at the time when the Report of the Committee of Physics was drawn up. The *discovery* of the moon's influence on any of the magnetic elements is due, as already stated, to Mr. Kreil; but Toronto is the first, and as yet the only, station at which the numerical values at every lunar hour of the lunar-diurnal variations of the three elements have been published. Corresponding statements to that which has been given for Toronto will be given for St. Helena and Hobarton in the volumes of those Observatories which are now in preparation. All the results

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\* Arago, *Annuaire*, 1836, p. 284.



at the three stations present the same *general* characters. The lunar influence does not appear to partake in the decennial inequality which is found in all the variations depending upon the sun.—(Phil. Trans. 1857, Art. I.) The lunar-diurnal variation of each of the elements is a double progression in the 24 lunar hours, having epochs of maximum and minimum symmetrically disposed. In character, therefore, it differs from what might be expected to take place if the moon were possessed of inherent magnetism—*i.e.* if she were a magnet, as it is usually termed, *per se*—and accords with the phenomena which might be expected to follow if she were magnetic only by induction from the earth. On the other hand, it is believed that the *amount* of the variation, as observed at each of these stations, very far exceeds what can be imagined to proceed from the earth's inductive action reflected from the moon. In this theoretical difficulty, we are naturally thrown back to seek a more extensive knowledge of the phenomena than we have yet obtained, and to the generalisation which will follow when sufficient materials for it have been procured. In subordinate particulars a difference which is apparently systematic is perceived to exist in regard to the hours which constitute the epochs of maxima and minima at the three stations, as well as in regard to the amounts of the respective variations; these differences are no doubt intimately connected with the causes of the phenomena, and are likely to lead to their elucidation. It is therefore greatly to be desired that the number of stations furnishing complete determinations, such as the Colonial Observatories only have hitherto supplied, should be increased.

The domain of periodical variations has thus been considerably enlarged since the Report of the Committee of Physics was drawn up, and must henceforth be understood to comprise, in addition to the variations "whose amount is a function " of the hour-angle of the sun, and of his longitude," [or of his declination] (Report, p. 10)—1°, those variations of the three elements whose amount is a function 'of the hour-angle of the moon; 2°, those variations which were classed in the Committee's Report as "irregular," or "apparently observing no law," but which are now known to be governed by laws depending on the sun's declination and hour-angle; and 3°, those variations, both "regular" and "occasional," which have their epochs and amounts dependent apparently on a solar period of not yet perfectly ascertained duration, manifesting itself also by periodical changes in the frequency and amount of the solar spots. With the exception of the last-named class, all these variations require for their generalisation that the phenomena should be investigated at several points of the earth's surface widely distant from each other; and we have now the knowledge, grounded on experience, that a very few years are sufficient for the observations at each station,

with the instrumental means and methods recommended by the Royal Society, and when the investigation is made a primary object by those who engage in it.

*Absolute Values and Secular Changes.*—But interesting and valuable as is the acquisition of a fuller and more precise knowledge of the comparatively small magnetic variations, produced at the surface of the earth by the action or influence of external bodies, even greater importance seems to attach, when *terrestrial* magnetism is in question, to the purposes of that distinct branch of the duties of a Magnetic Observatory, which consists in the determination of the absolute values and secular changes of the three magnetic elements. By the *absolute values* we seek to acquire a knowledge of the actual present order and distribution of the terrestrial magnetic influence at the surface of the earth, and to provide the materials by which the constancy, or otherwise, of the earth's magnetic charge may hereafter be examined; and by determinations of the present direction and amount of the *secular changes*, we seek to become acquainted with the laws, and ultimately with the causes, of that most mysterious change, by which the magnetic condition of the globe at one epoch passes progressively and systematically into that of another. It is specially by determinations of this class, obtained with the necessary precision in different parts of the globe, that (in the words of the Committee's Report) the "patient inductive inquirer" must seek to ascend to the general laws of the earth's magnetism." At the time when the Report of the Committee of Physics was written, doubts were reasonably entertained whether the limited time during which the Colonial Observatories were likely to be maintained in action would be sufficient for the determination of the secular changes; and it was therefore very properly urged, that "these changes" cannot be concluded from comparatively short series of observations without giving "to the observations *extreme nicety*, so as to determine with perfect precision the "mean state of the elements at the two extremes of the period embraced." It is with much satisfaction, and with a well-deserved recognition of the pains which have been bestowed by the successive Directors of the Toronto Observatory, and their assistants, to this branch of their duties, that I am able to refer to the determinations of the absolute values and secular changes of the three elements contained in this volume, in evidence that the instrumental means which were devised, and the methods which have been adopted, have proved, under all the disadvantages of a first essay, sufficient to determine these data with a precision which is greatly in advance of preceding experience, and, as far as may be judged, equal to the present requirements of theoretical investigation. It should, moreover, be noticed, that Toronto is a station where the casual and periodical variations, which it was apprehended would seriously

interfere with the determination of absolute values, are unusually large. We may derive, therefore, the greatest encouragement from the results thus obtained, to persevere in a line of research which is no longer one of doubtful experiment, and to give it that further extension which the interests of science require.

Amongst the results which have recompensed the labours of the Colonial Observatories in this branch of their inquiries, perhaps there is none of more general theoretical importance than the conclusion which has been established by means of the observations of the Declination at St. Helena, that the current annual amount of secular change takes place by *equal aliquot portions in every month, and even in every fortnight, of the year*. The magnitude of the annual change of the Declination at St. Helena, 8' (or more precisely 7'.93), in each of the eight years during which the observations were maintained, and the comparative tranquillity of the tropical regions in regard to magnetic disturbances, were circumstances which made St. Helena a particularly eligible locality for this investigation. The result has been to remove secular change conclusively and altogether from the category of atmospheric or thermic relations, with which, in the absence of a correct knowledge of the facts, it has frequently been associated, and to characterize it henceforward as a phenomenon of far more systematic order and regularity than had previously been generally apprehended.—(Proceedings of the Royal Society, vol. VII. pp. 67—75.)

It has thus been shown that in each and all of the branches of inquiry for which the institution of the Colonial Observatories was recommended they have accomplished the objects which were contemplated, and have in many respects exceeded the expectations on which the recommendation was founded. Nor has the scope of their performance been limited to a mere registry of the observations, or to their publication in a crude and undigested form. It was well remarked by an authority of the greatest weight, when addressing the British Association on the occasion of the assembly of the Magnetical and Meteorological Conference at Cambridge in 1845 (Herschel, Address, p. xxxv), that "a man may as well keep a register of his dreams as of the weather or any other set of daily phenomena, if the spirit of grouping, combining, and eliciting results be absent." To advance by the simple and straightforward path of inductive inquiry, in a science such as terrestrial magnetism in which a physical theory has yet to be sought, the endeavour must be made "to grapple with the palpable phenomena, seeking means to reduce their features to measurement, the measurements to laws, the laws to higher generalisations; and so step by step to advance to causes and theories." The mere observational part is not, and ought never to be, viewed as the fulfilment of the duties of institutions such as Magnetic Observatories;

those duties ought always to be held to include (either on the part of the Directors of the Observatories themselves, or on that of persons who, as Superintendents or otherwise, have constantly watched the progress of the work) "the systematic deduction from "the registered observations of the mean values, and of the local coefficients of diurnal, "annual, and secular change," because "no other class of persons stands in anything like "so favourable a position for working out the first elementary laws of phenomena, and "referring them to their immediate points of dependence," as those who have directed or superintended the processes by which the data required for the knowledge of the phenomena have been obtained. The introductory discussions prefixed to the several volumes which contain the observations of the Colonial Observatories,—and a succession of papers presented to the Royal Society and published in the Philosophical Transactions,—bear testimony to at least unsparing labour on the part of the Superintendent, to give a completeness to the experiment of Colonial Observatories corresponding to its original conception, though this portion of the duty might well have fallen into abler hands. One great advantage in the task has undoubtedly been enjoyed; viz. the union of the detailed knowledge above alluded to with the opportunity of generalisation, and consequent insight, afforded by results admitting of strict comparison and combination, obtained from well-selected stations at such distant points of the globe, and by a uniform system of observation.

It may be useful on the present occasion, that we should recall to more distinct recollection the views and opinions entertained by those who were the principal instigators of the proceedings by which the Royal Society became the responsible advisers,—and Her Majesty's Government the chief supporters,—of measures which have placed this country in the very conspicuous position of taking that lead in the advancement of certain branches of science which other nations were willing and desirous that she should take. These views cannot be better stated than in the words of one to whom all will be willing to concede pre-eminence, as well in counselling the recommendation to Government, as in conducting the several matters connected with it to a successful issue (Herschel, in Quar. Rev., No. CXXXI.):—"Great physical "theories, with their trains of practical consequences, are pre-eminently national "objects, whether for glory or utility. In effect, such they ought to be considered "by every nation calling itself civilized; and if we look to consequences, we have "only to point to the history of science in all its branches to show, that every great "accession to theoretical knowledge has uniformly been followed by a *new practice*, "and by the abandonment of ancient methods as comparatively *inefficient* and "*uneconomical*. This consideration alone we think sufficient to justify, even on

“ utilitarian grounds, a large and liberal devotion of the public means to setting on foot  
“ undertakings and maintaining establishments in which the investigation of physical  
“ laws and the determination of exact data should be the avowed and primary object,  
“ and practical application the secondary, incidental, and collateral one. That the  
“ time is now fully arrived when other great branches of physical knowledge must be  
“ considered as entitled to share in that public support and encouragement which has  
“ hitherto fallen to the lot of astronomy alone, will, we think, be granted without  
“ hesitation by all who duly consider the present state and prospects of science. The  
“ great problems which offer themselves on all hands for solution—problems which  
“ the wants of the age force upon us as practically interesting, and with which its  
“ intellect feels itself competent to deal—are far more complex in their conditions,  
“ and depend on data which to be of use must be accumulated in far greater masses,  
“ collected over an infinitely wider field, and worked upon with a greater and more  
“ systematised power, than has sufficed for the necessities of astronomy. The collect-  
“ ing, arranging, and duly combining these data are operations which, to be carried  
“ out to the extent of the requirements of modern science, lie utterly beyond the  
“ reach of all private industry, means, or enterprise. Our demands are not merely for  
“ a slight and casual sprinkling to refresh and invigorate an ornamental or luxurious  
“ product, but for a copious, steady, and well-directed stream, to call forth from a  
“ soil ready to yield it an ample, healthful, and remunerating harvest. There are  
“ secrets of nature we would fain see revealed; resources hidden in her fertile bosom  
“ for the well-being of man upon earth, we would fain see opened up for the use  
“ of the generation to which we belong. But if we would be enlightened by the  
“ one, or benefited by the other, we must *lay on power*, both moral and physical,  
“ without grudging and without stint.”

If at the period when it was still doubtful what the Colonial Observatories, then just established, might be able to accomplish,—and when in effect the expectations from them were little more than the anticipations of what a voyage of discovery upon an unknown ocean might produce,—the propriety of embarking upon such investigations was thus unhesitatingly affirmed, how much more confidently may the duty of *perseverance* be insisted upon, when the results of the first experiment have already more than realized the expectations which caused it to be undertaken. They have indeed confirmed the belief that “the gigantic problem proposed to be resolved” is of a nature to yield in its full extent only to “continued and persevering inquiry;” but at the same time they may be said to have narrowed the field of inquiry, by showing more distinctly than was previously apprehended, both what is desired to be known,

and how and where it is to be sought. If the history of magnetical science is to be something more than a fragment, the researches must be persevered in.

In considering the means by which the researches thus opened out may be most advantageously prosecuted, it is natural that we should look in the first instance to the adoption, at other selected stations, of arrangements similar to those which were instituted at the stations which were chosen for a first, and, as it has proved, successful, experiment; and with this view, I may be permitted to restate the opinions which I submitted to the Magnetical and Meteorological Conference at Cambridge in 1845, as all that has since taken place has served to confirm those opinions:—

“ Before I close this communication, I wish to advert to the expediency of extending the system of observation now in operation at Toronto, St. Helena, and the Cape of Good Hope, to other of the British colonies, where the same objects can be accomplished in an equally effective and economical manner.

“ In cases where the institution of similar establishments is strongly urged by the Governor of a colony,—where competent persons are present and disposed to superintend the observations,—and where soldiers of the artillery are stationed, whose services may be available, and whose employment has been shown to be economical and effective in a high degree in the execution of a laborious and exact routine of observation,—there is wanting only a supply of instruments, the temporary allotment of a building to contain them, extra pay such as the individuals at the above-named Observatories receive, and an authorised connexion with a head-quarter establishment, whence they may derive instruction and guidance.

“ The cost of one of the Ordnance Observatories (including 100*l.* a year for incidentals of all kinds) is 392*l.* a year, exclusive of publication. It may be assumed that five years of hourly observation is a sufficient time of continuance for obtaining in any particular colony the mean values of the magnetical and meteorological elements, and their diurnal, annual, and secular variations, as well as the peculiarities of climate bearing on the health and industrial occupations of man. If the observations were printed *in full detail* for the five years, they would occupy two quarto volumes; but if it were thought sufficient hereafter that duplicate or triplicate manuscript copies should be deposited in different public libraries, and that publication should be confined to abstracts and an analysis, the cost of the publication would form but a small addition.

“ The colonies of Ceylon, New Brunswick, Bermuda, and Newfoundland are in the described case; their respective Governors are recommending the establishment of Magnetical and Meteorological Observatories in them; competent Directors are on the spot” (this was written in 1845); “ and they are all artillery stations.”

To the four stations thus named may now be added Mauritius and Demerara, as from both these colonies strong and repeated applications to the same effect have been sent through their respective Governors to the Secretary of State for the Colonies. Both these colonies have offered to bear a portion of the expense of the proposed establishments, and have earnestly solicited to be placed in connexion with a head-quarter establishment, from which they might receive properly constructed instruments, with instructions and guidance in their use. Can it be said that we perform our duty as a mother country when we put such applications on the shelf?—whilst, in the interests of science, it would be difficult to estimate too highly the value of such institutions,—in forming good observers, who might subsequently extend their activity over a wider range,—in affording to travelling observers the opportunity of testing and correcting their instruments, as well as keeping up and perfecting their skill in observation,—and in contributing to arouse, to nourish, and to extend to other parts of natural knowledge that desire for the greatest possible accuracy, which was formerly met with only in astronomy and in geodetical operations of the highest class.

When it was first suggested that the officers and soldiers of the scientific corps of the army (Artillery or Engineers) stationed in the colonies might, both beneficially to themselves and advantageously to the public interests, be made available for the performance of such temporary services, the suggestion, from its novelty, might have been open to many objections. None were, indeed, made by the military authorities of the time, who, on the contrary, approved and encouraged the proposition. There may have been doubts entertained in other quarters whether persons, whose ordinary occupations were so dissimilar, would be found to possess the necessary qualifications for carrying out a scheme of exact and varied observation, in which there was no precedent to guide, and of which the performance would be sure to be extensively and closely scrutinized; but such doubts, if they existed, have probably long since subsided as the successive volumes of the Colonial Observatories have appeared; and if any should yet remain, the contents of the present volume, it is hoped, may entirely remove them.

One great and unquestionable advantage which future institutions of this nature will have over those whose duties are accomplished, will be found in the assistance they will derive from the *Physical Observatory of the British Association* at Kew, as a head-quarter Observatory, in which their instruments can be prepared and verified, the constants, &c. carefully determined, new instruments be devised as occasion may require, and be tested by experiment before they are sent out for use; and to which practical difficulties of all kinds which may present themselves to the Directors

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may be referred. The omission of a provision of this kind, when the Observatories were first formed, was undoubtedly a great fault, which has been, and could only be, very imperfectly remedied by the Woolwich establishment, designed for a very different purpose, and of insufficient strength even for the duties for which it was designed.

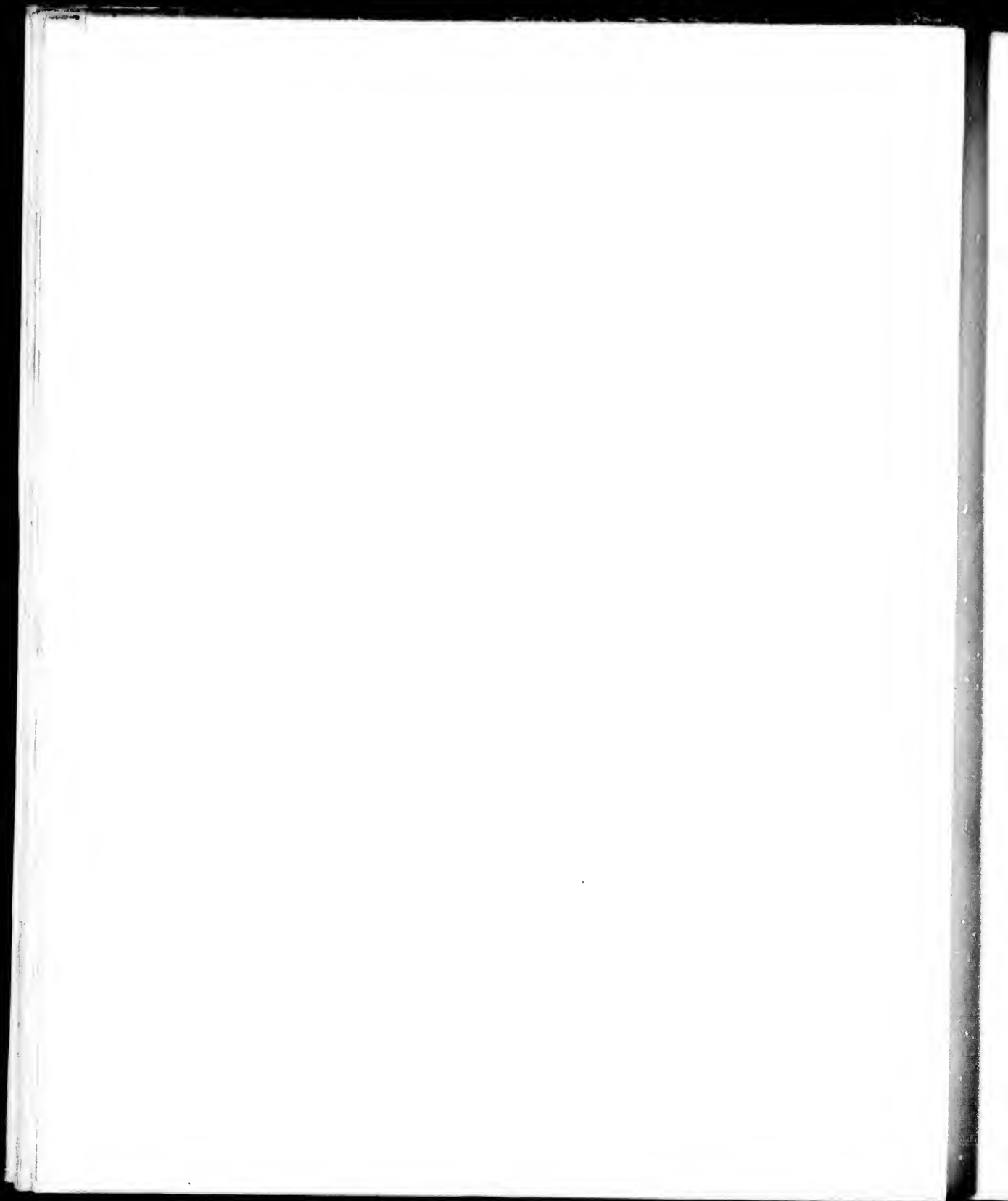
The colonial establishments were first instituted at the instance of the Royal Society and British Association, with a more general concurrence and approval on the part of the cultivators of science in all parts of the globe than, it is believed, were ever before manifested in regard to any purely scientific undertaking; and with such a cordial and effectual co-operation of the public authorities as is well deserving of being held in remembrance. It is for those two great scientific bodies to consider whether any and what steps should now be taken to procure the continuance of the researches.

EDWARD SABINE.

*Woolwich, March 1857.*

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ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

HORIZONTAL FORCE.

*Separation and Analysis of the larger Disturbances.*—An important preliminary step in this investigation must be the examination in the most direct and practical manner, *i.e.*, by means of the observations themselves, of the equivalent, in divisions of the scale of the Bifilar Magnetometer, to a change of temperature of 1° Fahrenheit.

From the latter end of 1843 to the termination of the hourly series in June 1848, we have an unbroken series of Bifilar observations particularly suitable for this examination, inasmuch as that interval comprehends the principal part of the observations which it is intended to employ in the purposed investigation. Collecting into one view the mean monthly scale readings and their corresponding temperatures from the general monthly tables of the Horizontal Force in vols. II. and III. of the Toronto Observations, we have as follows:—

TABLE I.

Month and Year.	Monthly Mean in Scale Divisions.	Temperature of the Magnet.	Quarterly Mean in Scale Divisions.	Quarterly Mean Temperature.	Seasons.
1843. December -	514'94	43'95	} 519'96	41'73	Winter Quarter (1).
1844. January -	525'33	37'95			
February -	519'62	43'28	} 503'79	54'60	Spring Quarter (2).
March -	512'61	46'29			
April -	498'11	56'65			
May -	500'67	60'85	} 510'28	68'13	Summer Quarter (3).
June -	506'31	65'36			
July -	507'96	70'32	} 548'99	55'15	Autumn Quarter (4).
August -	516'58	68'72			
September -	529'07	65'33	} 577'93	42'61	Winter Quarter (5).
October -	552'37	53'25			
November -	565'53	46'88	} 564'20	53'73	Spring Quarter (6).
December -	577'33	42'40			
1845. January -	576'39	42'52	} 551'88	71'07	Summer Quarter (7).
February -	580'08	42'90			
March -	571'22	47'97	} 564'20	53'73	Spring Quarter (6).
April -	562'57	53'65			
May -	558'82	59'57	} 551'88	71'07	Summer Quarter (7).
June -	554'14	67'39			
July -	548'70	72'45	} 551'88	71'07	Summer Quarter (7).
August -	552'80	73'37			

(Continued on p. ii.)

TABLE I.—*continued.*

Month and Year.	Monthly Mean in Scale Divisions.	Temperature of the Magnet.	Quarterly Mean in Scale Divisions.	Quarterly Mean Temperature.	Seasons.
1845. September -	570'93	63'24	} 586'61	56'90	Autumn Quarter (8).
(cont.) October -	586'86	57'68			
November -	602'05	49'79			
December -	617'16	40'61	} 614'15	42'74	Winter Quarter (9).
1846. January -	611'77	44'84			
February -	613'53	42'78			
March -	601'03	50'25	} 591'39	55'99	Spring Quarter (10).
April -	593'09	54'53			
May -	580'05	63'18			
June -	575'55	69'10	} 573'11	72'51	Summer Quarter (11).
July -	571'16	74'19			
August -	572'61	74'25			
September -	580'78	69'97	} 599'28	59'84	Autumn Quarter (12).
October -	602'27	56'70			
November -	614'80	62'86			
December -	635'55	43'23	} 636'43	41'93	Winter Quarter (13).
1847. January -	640'48	40'17			
February -	633'26	42'37			
March -	627'88	44'70	} 616'78	62'36	Spring Quarter (14).
April -	616'15	51'56			
May -	606'31	60'82			
June -	606'51	61'46	} 597'24	69'72	Summer Quarter (15).
July -	590'43	73'64			
August -	594'77	71'07			
September -	602'76	62'67	} 612'76	56'68	Autumn Quarter (16).
October -	615'17	56'05			
November -	620'34	51'31			
December -	636'98	45'47	} 636'56	44'15	Winter Quarter (17).
1848. January -	636'08	43'31			
February -	636'62	43'98			
March -	635'50	46'86	} 625'39	54'06	Spring Quarter (18).
April -	625'48	53'36			
May -	617'48	61'96			

It is obvious on the first glance that, independently of variations in the scale readings from the influence of temperature, there was a progressive increase in the scale readings (though by no means regular or even uniformly progressive) from the commencement of the series to its close. According to the mode in which the Bifilar was adjusted, an increase in the scale reading should correspond to a decrease of force either in the earth's magnetism or in the magnetism of the Bifilar Magnet. In the latter case, (that of the decrease of the magnetism of the bar,) we have no reason to expect that the decrease should be regular or uniform; viz., of equal amount in equal times. Nor in respect to secular change in the magnetism of the earth could we venture to assume, in the present state of our knowledge, that the progress of such secular change, whether it were an increase or a decrease of the force, should be uniform. If, however, we except the increase in the scale readings between the spring and summer quarters in 1844, when, from some peculiar cause, it was greater than

ordinary, the departures from a uniformly progressive increase will not appear great, particularly when we take into account the influence of magnetic disturbances, and of the regular periodical variations in the earth's horizontal force in different parts of the year, by which the different quarters may have been influenced. If, therefore, we take the mean between the scale readings, and also between the temperatures in the winter quarters of 1843-1844 and 1844-1845, Nos. (1.) and (5.), and compare these means with those of the intermediate summer quarter in 1844, No. (3.), regarding the difference in the scale divisions  $\left(\frac{519 \cdot 96 + 577 \cdot 93}{2} - 510 \cdot 28 = 38 \cdot 67\right)$  as the value in scale divisions corresponding to the differences of the winter and summer temperatures  $\left(\frac{41^\circ \cdot 73 + 42^\circ \cdot 61}{2} - 68^\circ \cdot 13 = 25^\circ \cdot 96\right)$  we shall have  $\frac{38 \cdot 67}{25 \cdot 96} = 1 \cdot 48$  as the scale equivalent to  $1^\circ$  Fahrenheit, a result subject only to inaccuracies which may be due to magnetic disturbances, or to irregularities in the decrease of magnetic force in the bar magnet, or to other causes which we are not able to particularize, which may have influenced the departures from uniformity in the progressive increase in the scale divisions during the period under consideration. In like manner, a combination of the spring and autumn quarters in 1841 with the intermediate summer quarter in the same year (Nos. (2.) and (4.) with No. (3.)) will yield a second result, but of comparatively less value than the first, because the differences of temperature between the summer and the mean of the spring and autumn quarters are less than between the summer and winter quarters. The eighteen quarters will thus yield fifteen results, which are as follow:—

TABLE II.

	Differences of Temperature.	Differences of Scale readings.	Equivalent of $1^\circ$ Fahrenheit.
(1) and (5) with (3)	- - 25'96	38'67	= 1'48
(2) and (4) with (3)	- - 13'25	16'08	= 1'21
(3) and (7) with (5)	- - 27'00	46'85	= 1'73
(4) and (6) with (5)	- - 11'83	21'33	= 1'80
(5) and (9) with (7)	- - 28'40	44'16	= 1'57
(6) and (8) with (7)	- - 15'76	23'52	= 1'49
(7) and (11) with (9)	- - 29'05	51'65	= 1'78
(8) and (10) with (9)	- - 13'70	25'15	= 1'84
(9) and (13) with (11)	- - 30'18	52'18	= 1'74
(10) and (12) with (11)	- - 14'59	22'22	= 1'52
(11) and (15) with (13)	- - 29'19	51'25	= 1'78
(12) and (14) with (13)	- - 14'17	28'40	= 2'00
(13) and (17) with (15)	- - 26'68	39'25	= 1'47
(14) and (16) with (15)	- - 15'20	17'53	= 1'15
(16) and (18) with (17)	- - 11'22	17'49	= 1'56
Sums	- 306'17	495'73	= 1'62

Whence  $\frac{495 \cdot 73}{306 \cdot 17} = 1 \cdot 62$  is the equivalent in scale divisions to  $1^\circ$  of temperature.

The quarters into which the year is here divided are those usually called "Meteorological Seasons," December being classed with January and February, and August with June and July. By this division of the year the differences of temperature between the seasons compared are greater than if the more ordinary division had been adopted.

The partial results obtained by the comparison of the summer and winter quarters (which have the largest differences of temperature) exhibit a very satisfactory accord. There are seven such comparisons, and their results are as follow:—

TABLE III.

	Differences.		Equivalent to $1^\circ$ .
	Temperature.	Scale-readings.	
(1) and (5) with (3) -	25° 96	38° 67	Sc. Div. 1' 48
(3) and (7) with (5) -	27° 00	46° 85	1' 73
(5) and (9) with (7) -	28° 40	44° 16	1' 57
(7) and (11) with (9) -	29° 05	51° 65	1' 78
(9) and (13) with (11) -	30° 18	52° 18	1' 74
(11) and (15) with (13) -	29° 13	51° 25	1' 78
(13) and (17) with (15) -	26° 63	39° 25	1' 47
	196° 35	324° 01	1' 65

Whence  $\frac{324 \cdot 01}{196 \cdot 35} = 1 \cdot 65$ , the equivalent to  $1^\circ$ . The value which has been adopted in reducing the observations to an uniform temperature during the period under consideration is  $1 \cdot 63$ .

According to the method prescribed in the Instructions of the Royal Society, the equivalent in scale divisions for  $1^\circ$  of temperature should be obtained by dividing the change corresponding to  $1^\circ$  of temperature found by experiment in the magnetic moment of the Bifilar Magnet, by the scale coefficient or the value of one division of the scale, both being expressed in parts of the Horizontal Force. The first of these values (viz.,  $q$ , = the change in the magnetic moment of the magnet for  $1^\circ$  of Fahrenheit) was found, by the experiments recorded in vol. H. p. liii, to be  $\cdot 000234$  parts of the Horizontal Force; and that of the scale coefficient  $k = \cdot 000087$ , also in parts of the force (pp. li and lii). The change in the scale-readings corresponding to  $1^\circ$  of temperature should have been, therefore,  $\frac{q}{k} = \frac{\cdot 000234}{\cdot 000087} = 2 \cdot 69$  scale divisions. This is the value which, in conformity with the instructions under which the colonial observatories have acted, has been employed in the discussion of the Bifilar observations in the preceding Toronto volumes. It is no doubt quite possible that the values of the temperature and

of the scale-coefficients, as determined by the experiments referred to, may have been, either one or both, slightly inaccurate; but it is scarcely possible to imagine inaccuracies, in either or in both, of sufficient importance to account for the difference between 2.69 and 1.63. The existence of a similar discrepancy in the case of the Makerstoun Bifilar has been shown by Mr. Broun in his very valuable discussion of the observations made at that observatory. The experiments by which the change in the magnetic moment of the bar, corresponding to variations of temperature, is determined, are made with the magnet *dismounted*; and it may be quite possible that the suspension may in some cases (if not in all the Bifilar Magnetometers of the description employed in the colonial observatories) exercise an influence in the changes of direction of the magnet produced by changes of temperature, which was not taken into account in the prescribed Instructions. Whatever may be the cause of the difference, however, there can, I apprehend, be no hesitation in preferring the result which is derived directly from the observations themselves.

The correct amount of this very important element in the reduction of the observations was the subject of earnest and even anxious consideration with Captain Lefroy during the latter part of his stay at Toronto, and led to an endeavour, after the hourly series had terminated, to ascertain the effect of changes of temperature on the readings of the Bifilar scale by a direct experiment with the magnet suspended precisely as when employed in the hourly observations. For this purpose the magnetometer was enclosed by boards extending from the floor to the ceiling, in a space sufficiently large to include also a copper stove. The scale was read by means of an aperture, which could be closed by a slider when not required. The account of this experiment, and its result, cannot be better related than by making the following extract from Captain Lefroy's report:—"The experiments were made by kindling a fire and keeping  
 " up the temperature for three days, then allowing it to go out, and opening the  
 " communication with the external air for the same length of time. There were five  
 " cold and three hot alternations, each of three days. The readings were taken every  
 " half-hour from 6 A.M. to 11 P.M., and at each reading the *small Bifilar*, which had  
 " been in adjustment since December 1845, was also observed. It was hoped that the  
 " small Bifilar would not show the changes of temperature of the other instrument, but  
 " it was not found practicable to prevent the whole body of air in the room being  
 " affected by these changes to some extent. Instead, therefore, of having a means of  
 " correction independent of the temperature coefficient of the second instrument, we  
 " have to reduce the small Bifilar readings to an uniform temperature by the employ-  
 " ment of its own coefficient: but, in the first place, the value of  $\frac{g}{k}$  obtained for this  
 " instrument in the ordinary way is more likely to be practically correct than that of  
 " the other instrument, the suspension of the one being of silk and the other of metal;  
 " and in the second place, the value of  $k$  given by adjustment for this instrument

“ (‘0003551) agrees very nearly with the value found by deflection (‘0003644);  
 “ lastly, if the correction  $\frac{q}{k}$  employed be somewhat in error, the result will be affected  
 “ only by the difference between the actual and the assumed value, which cannot be  
 “ important upon differences not exceeding  $5^\circ$ , as compared with the correction for  
 “ differences averaging  $61^\circ$  with the other instrument. To compute the results two  
 “ abstracts are formed, one containing the half-hourly observations on the fifteen cold  
 “ days, the other those of the twelve hot days: by these we get two diurnal curves with  
 “ both instruments, which must be exactly comparable as diurnal curves, the days being  
 “ alternate. The differences between the corrected mean scale reading of the small  
 “ Bifilar for the same hour of observation by the two diurnal curves is therefore the  
 “ change of Horizontal Force which we have to eliminate before comparing the corre-  
 “ sponding readings of the large Bifilar. Multiplying this difference by the ratio of the  
 “ scale coefficients of the two instruments, and applying it as a correction to the second  
 “ curve of the large Bifilar, the two curves of the latter instrument are reduced to the  
 “ same values of the Horizontal Force, and the difference of scale reading between them  
 “ is the residual effect of the change of temperature. We have then from the successive  
 “ half-hourly observations a like number of equations; omitting the three first half-  
 “ hours on each day, when it may be probable that the magnet may not have taken  
 “ up the temperature indicated by the thermometer (the bulb of which was, however,  
 “ close to it), we obtain, as the result of the whole, 1.74 as the equivalent in scale  
 “ divisions for  $1^\circ$  of Fahrenheit.”

“ The inner case of gilt wood was removed, and the outer one was slightly raised by  
 “ wedges to allow the air in the box to acquire the temperature of the rest of the room.  
 “ There was no reason to suppose that currents of air affected the scale readings: there  
 “ was no iron whatsoever about the stove, and it was always in the same position,  
 “ whether heated or otherwise.”

That the result of these experiments should exhibit so close an approximation to  
 the value (1.63) which has been found to represent the actual change produced in the  
 readings of the scale by  $1^\circ$  of temperature in the whole body of the observations  
 themselves, is a strong testimony to the care which must have been taken in conducting  
 the experiments under the very difficult condition of regulating artificial temperatures  
 in air heated by a stove.

The separation and analysis of the larger disturbances of the Horizontal Force has been  
 conducted on the principle already described in discussing the larger disturbances of the  
 Declination (Toronto Observations, vol. II. pp. xxii to xxxv). As the first step, the  
 whole of the observations were reduced individually to an uniform temperature of  $55^\circ$ ,  
 employing the coefficient named in the preceding pages (1.63); the *mean* scale division  
 was then computed for every hour in each of the sixty months, and the correctness of the  
 whole work was examined by the comparison of these hourly means with the hourly

means printed in the monthly tables, the latter being reduced to the standard temperature of  $55^{\circ}$  by the application in each case of the correction due to the difference between the recorded temperature and  $55^{\circ}$ .

The hourly means thus corrected in each month presented to the eye at the different hours the diurnal variation of the Horizontal Force, cleared from the influence of temperature on the magnetism of the bar, but retaining whatever effects may have been due to disturbances. For the purpose of eliminating the disturbances of largest amount, the observations which had been individually corrected for temperature were compared each with the monthly mean, at the same hour and in the same month, and every observation which differed 14.0 scale divisions or more from that mean was provisionally marked as a disturbed observation. Fresh means for each hour in each month were then taken, omitting the observations marked as disturbed, and the means thus obtained were then used as standards of comparison for a second examination. This process was repeated until the hourly means were strictly the means of all the remaining observations, after the separation of those which differed from them respectively by 14.0 scale divisions or more.

The value of 14 scale divisions in parts of the Horizontal Force at Toronto was about .0012. When the larger disturbances are thus separated, the diurnal variation at the same period of the year, in different years, exhibits a very satisfactory accordance; and, by the process of elimination which has been explained, it is probable that the diurnal variation has very little, if any, influence on the determination of the observations separated as disturbed.

A much greater practical difficulty has been occasioned by a circumstance already noticed in discussing the temperature-coefficient, namely, the progressive increase in the scale readings, partly from secular change and partly also from instrumental causes. Whenever the amount of increase in the course of a month was seen to be such as to interfere with the proper comparability of the observations in the earlier or later portions of the month with the means taken in the usual manner, fresh means, more suitable for the comparison, have been formed; thus, for example, for comparison with the observations in the last week of one month and the first week of the next, it has in some instances appeared preferable to form the hourly means from the whole of the observations of the two months united, instead of from each month separately, whereby the advantage is gained, that the period which furnishes the standard of comparison for the fortnight in question extends to a nearly equal distance on either side of the observations compared with it. In a few instances in which the increase was more irregular than was commonly the case, fortnightly means, and even, when absolutely required, weekly means, have been substituted for the monthly or two-monthly means. This part of the process requires in the person who conducts it an attentive preliminary consideration and study of the observations, and it is important that it should be carefully executed, because normal values, correctly obtained, form an essential basis for the



study of all the terrestrial magnetic variations. To facilitate researches of this nature in which the observations contained in these volumes may hereafter be employed, as well as to show the steps by which the conclusions now submitted have been arrived at, a table of the hourly means of the readings of the Horizontal Force Magnetometer reduced to 55° Fahrenheit, and omitting the observations in which the amount of disturbance equalled or exceeded 14 scale divisions (or .0012 parts of the whole Horizontal Force,) is subjoined at the close of this discussion (pp. xviii to xxi), specifying in each case the interval to which the normal values correspond, as well as the interval comprehended by the observations from which they have been derived.

The period which the hourly observations included in this investigation comprise is one of five complete years, terminating on the 30th June 1848. It is not, however, an absolutely unbroken period, as in October 1843 the magnet of the Vertical Force Magnetometer was displaced from its mounting, and employed in experiments designed to show the change in its magnetic moment occasioned by changes of temperature. It was remounted in February 1844; consequently the five months from October 1843 to February 1844 that would have made a *continuous* suite during the five years are deficient. These have been replaced (in the similar investigation to the present, in which the observations of the Vertical Force Magnetometer have been employed) by the observations of the same months of the preceding year, viz., October 1842 to February 1843. And as it is desirable that the five years submitted to this investigation should consist of identical months in the Horizontal and in the Vertical Force, the observations of the Horizontal Force during the months from October 1843 to February 1844 have been replaced by those of October 1842 to February 1843. It will be understood, therefore, that whenever in the subjoined pages the year ending June 30th 1844 is spoken of in reference to the Horizontal and Vertical Forces, (and to their theoretical equivalents, the Inclination and Total Force,) the months which constitute that year consist of July to September 1843 inclusive, October 1842 to February 1843 inclusive, and March 1844 to June 1844 inclusive.

The course that has been followed in working out the several parts of the process by which the larger disturbances of the Horizontal Force have been separated from the other observations, and the laws of their periodical variations shown, has been as follows:—The hourly observations of the Bifilar Magnetometer during the five years terminating June 30, 1848, were received at Woolwich from Toronto precisely in the state in which they appear in the 2d and 3d Toronto volumes; namely, the readings, uncorrected for temperature, at every hour of Göttingen time, arranged in monthly tables, accompanied by corresponding tables of the temperature of the Bifilar Magnet, shown by a thermometer of which the ball was enclosed in the same case with the magnet, and which was read contemporaneously with the Bifilar scale. The monthly tables of the scale readings and of the temperature were summed before their transmission to Woolwich, both in Vertical and Horizontal columns, and means

taken of all the days in the month at the different hours, and of all the hours of the day on the different days, forming "hourly means" and "daily means." In this state the Observations were received at Woolwich and printed; they were, in fact, printed from the original manuscripts.

The first step taken at the Woolwich office was to rewrite the whole of the observations of the five years in scale divisions, corresponding to the respective readings, but reduced to an uniform temperature of  $55^{\circ}$ , taken as a convenient approximate mean temperature; for this purpose each of the observations had to receive a correction proportioned to the difference between the recorded contemporaneous reading of the thermometer and the standard temperature of  $55^{\circ}$ , and computed by a coefficient representing the change in the scale reading produced by an alteration of  $1^{\circ}$  of the thermometer. The mode and process of deriving this coefficient from the observations themselves has been stated in pp. i to vi of this volume. The formation of the monthly tables of the "Scale Readings reduced to a uniform temperature of  $55^{\circ}$ " from the tables "uncorrected for temperature" was performed, under the superintendence of Mr. Magrath, the principal clerk in this office, by two non-commissioned officers, each working independently of the other, and having the correctness of the work proved by the accordance of the two independent computers; the daily and hourly means were then taken in the same manner by two independent computers, and were additionally checked by comparison with the daily and hourly uncorrected means calculated at Toronto, when these means were also reduced to the standard temperature of  $55^{\circ}$  [excepting in a very few instances in which the observations on days of *excessive* disturbance had been omitted in the sums and means of the uncorrected readings computed at Toronto, but were restored in the sums and means of the corrected tables]. The new tables thus formed, of the scale readings reduced to  $55^{\circ}$ , then passed into my hands; and having satisfied myself by a careful examination that a difference of 14 scale divisions above or below what might be taken as a normal value, (viz., the mean value at the same hour during the same month, or for several preceding and several succeeding days,) would constitute a convenient minimum limit for the disturbances of largest amount—being on the one hand a greater departure from the normal value than could reasonably be ascribed to any other cause than that of a disturbance in the earth's magnetism, whilst on the other hand the number of disturbances that would be thereby separated would form a sufficient body to permit their periodical laws (if such existed) to be investigated—I proceeded to mark provisionally with a pencil every observation which differed 14 scale divisions or more from its normal. I then recomputed the normals omitting the observations provisionally marked as disturbed, and compared afresh all the observations, including the provisionally marked ones, with the new normals, altering the markings where required, and continuing this process until the normal in every case included every observation which differed less than 14 scale divisions from itself, and excluded every

observation which differed 14 scale divisions or more from itself; the latter were then marked finally with a surrounding ring in ink. In this state the tables were returned to the office, and the correctness of the markings, and of the normals excluding the larger disturbances, was examined by a separate computer.

A table was then formed by two computers working separately, and their work compared, of the marked disturbances during the five years, arranged chronologically, showing the day, the hour, and the amount of disturbance (*i.e.* the difference from the normal) in scale divisions; and on the receipt of this table from the office I proceeded to distribute the disturbances according to the years, months, and hours of their occurrence, separating them into disturbances increasing and disturbances decreasing the force, and forming the tables contained in the following analysis; the correctness of the distribution and of the calculations in each of the tables being in every case examined by a second person.

In the course of the process of marking the disturbances it became evident, as already remarked, that there were times, occasional but by no means frequent, when the change in the mean monthly scale reading, (*i.e.* the means of all the hours and all the days in the month from one month to the next,) was so considerable as to cause the regular hourly normals of the month to be inapplicable to the earlier or later portions of the month. In such cases the difficulty was met, and more suitable normals obtained for the earlier or later portions of the month, by taking the hourly means of the last fortnight of the one month and the first fortnight of the next, or by a mean of the normals of the two months combined; or in a very few instances, in which the departure from an uniformly progressive change was greatest, by normals derived from periods of less duration than a month.

The number of the Bifilar observations in which the amount of disturbance equalled or exceeded 14·0 scale divisions in the five years was 2968, being about 1 in between 12 and 13 of the whole body of the observations.

The aggregate values of the disturbed observations of the Horizontal Force in the different *years*, each ending June 30, are as follow—

TABLE IV.

Year ending June 30,						Ratio.
1844	-	-	8618·7	Se. Div.	-	0·49
" "	1845	-	-	8032·4	"	0·45
" "	1846	-	-	9479·2	"	0·53
" "	1847	-	-	19700·1	"	1·11
" "	1848	-	-	42905·3	"	2·42
Total in the Five Years			-	<u>88735·7</u>	"	

The sum of the disturbances in the five years (88735·7 *sc. div.*) gives an annual mean of 17747·1 *sc. div.*; and calling this annual mean = 1·00, we obtain the ratios which the aggregate values in the different years bear to the average annual value. We find in this table a progressive increase in the annual value of the disturbed observations from the years ending in June 1844 and June 1845 to the year ending June 1848. The aggregate value in the year ending June 1844 exceeds by a small amount that of the year ending June 1845; but it will be remembered that the former of these two years included five months taken from the preceding year, namely, October 1842 to February 1843 inclusive, in consequence of the Vertical Force Magnetometer having been dismantled from October 1843 to February 1844 inclusive; and as we learn from the observations of the Declination at Toronto, (Vol. II. p. xxiii) that 1843 was a year of minimum disturbance in comparison with the years which preceded and followed it, it was to be expected that the aggregate value of the disturbed observations which stand in the table as corresponding to the year ending June 1844, should be swelled by the substitution of the disturbances in five months of a preceding year. It will be seen in the sequel, that when the months actually belonging to the year ending June 1844 are employed, the aggregate values, and consequently the ratio in that year, are *less* than in 1845.

Table V. exhibits the aggregate values in the different years, divided into disturbances increasing the force and disturbances diminishing the force.

TABLE V.

		Increasing.	Decreasing.	
Year ending June 1844	- -	1963·9	6654·8	<i>sc. div.</i>
"    "    1845	- -	1122·5	6909·9	"
"    "    1846	- -	1566·8	7912·4	"
"    "    1847	- -	2385·8	17314·3	"
"    "    1848	- -	5015·5	37889·8	"
Totals in the five years	- -	<u>12054·5</u>	<u>76681·2</u>	

It appears from this table that the effect of the larger disturbances was in each year to diminish the Horizontal Force considerably more than to increase it. The ratio of the value of the disturbances decreasing the force to those which increased it was, on the average of the five years, nearly as 6·4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the different *months* of their occurrence. The final column expresses the

ratio which the values in the preceding column bears to the mean monthly value or average of all the months :—

TABLE VI.

Months.	Year ending June 30,					Sums in the Five Years.	Ratios.
	1844.	1845.	1846.	1847.	1848.		
July - - -	Se. Div. 1092'6	Se. Div. 190'6	Se. Div. 630'2	Se. Div. 1218'3	Se. Div. 1383'1	Se. Div. 4514'8	0'61
August - - -	585'9	788'7	740'2	1609'6	1876'5	5600'9	0'75
September - - -	300'4	1266'6	1211'7	3092'7	6739'9	12611'3	1'71
October - - -	576'4	1201'8	575'7	2637'2	5931'9	10923'0	1'48
November - - -	2004'6	1132'9	235'3	642'9	3225'0	7240'7	0'98
December - - -	610'2	719'3	546'6	352'6	7174'8	9403'5	1'28
January - - -	401'2	702'1	598'3	452'0	2112'8	4266'4	0'58
February - - -	139'6	471'0	429'9	936'3	4941'7	6918'5	0'94
March - - -	1122'3	422'0	895'3	1741'2	2721'0	6901'8	0'94
April - - -	1223'9	611'1	1289'5	3731'2	4187'6	11043'3	1'50
May - - -	456'4	369'8	1241'8	2515'7	2012'6	6626'3	0'90
June - - -	105'2	156'5	1069'0	786'1	568'4	2685'2	0'36
Total in the five years - - - - -						58735'7	
Mean monthly value - - - - -						$\frac{58735'7}{12} =$	7395 = 1'00

April and September are the months of maximum disturbance, and January and June of minimum disturbance. The progression from the maxima to the minima and from the minima to the maxima are continuous, with the exception of the month of December; an exception obviously caused by the occurrence of excessive disturbance December 1847. If the year ending June 1848 be omitted, the ratios in December and January of the other four years to the average monthly disturbance in those four years are, of December 0'58 to 1, and of January 0'56 to 1. On the whole, therefore, we may conclude that in the larger disturbances of the Horizontal Force, as in those of the Declination (Toronto Observations, Vol. II. p. xxvi), the greatest amount of disturbance takes place at or about the equinoxes, and the least at or about the solstices. The amount of disturbance at the equinoxes (April and September) is to that at the solstices (January and June) in the proportion of between 3 and 4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the different *hours* of their occurrence.

HORIZONTAL FORCE : DISTURBANCES.

TABLE VII.

*Aggregate Values of the Disturbances, distributed into the different Hours of their Occurrence, with the Ratios of the Values at each Hour to the Mean Hourly Value or Average of all the Hours.*

Toronto Astronomical Hours.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Hours.
	1844.	1845.	1846.	1847.	1848.			
18	335'6	201'8	200'8	879'1	2263'9	3881'2	1'00	6 a.m.
19	296'3	273'2	210'8	860'6	3507'9	5138'8	1'40	7 a.m.
20	178'6	171'5	297'5	716'0	2953'7	4317'3	1'20	8 a.m.
21	331'5	317'5	463'6	728'5	2203'0	4047'1	1'09	9 a.m.
22	563'3	446'2	411'3	770'2	1515'3	3706'3	1'00	10 a.m.
23	478'0	378'8	399'9	624'8	1570'2	3451'7	0'90	11 a.m.
0	475'9	415'9	386'3	606'5	1393'6	3278'2	0'87	Noon.
1	394'0	275'7	470'1	413'7	1249'6	2803'1	0'76	1 p.m.
2	395'1	264'7	242'3	540'5	1019'2	2461'8	0'66	2 p.m.
3	288'7	231'3	369'0	548'6	1015'8	2453'4	0'66	3 p.m.
4	345'5	141'5	327'6	522'7	929'4	2266'7	0'61	4 p.m.
5	421'6	322'6	260'4	629'0	902'1	2535'7	0'66	5 p.m.
6	367'9	187'9	326'4	517'5	774'7	2174'4	0'59	6 p.m.
7	353'7	351'0	259'3	480'5	1355'8	2800'3	0'76	7 p.m.
8	344'6	363'2	433'6	515'3	1111'1	2767'8	0'75	8 p.m.
9	459'0	366'3	504'6	1012'5	966'5	3308'9	0'90	9 p.m.
10	496'7	431'0	622'5	933'2	1324'1	3810'5	1'03	10 p.m.
11	322'3	285'1	556'9	1187'7	1851'7	4203'7	1'14	11 p.m.
12	293'8	537'0	625'3	990'5	2217'5	4694'1	1'22	Midnight.
13	366'1	541'9	544'8	1613'6	2597'8	5667'2	1'53	1 a.m.
14	399'9	458'1	464'5	1463'2	3155'7	5941'4	1'60	2 a.m.
15	248'5	390'3	532'0	1453'3	2427'5	5051'6	1'37	3 a.m.
16	212'8	311'4	317'1	938'6	2430'0	4209'9	1'14	4 a.m.
17	256'3	362'5	252'6	754'0	2139'2	3764'6	1'02	5 a.m.
Total in the five years						- - - 88735'7		
Mean hourly value						- - $\frac{88735'7}{24} =$	3697 = 1'00	

When we examine the ratios presented in this table we at once perceive that the occurrence of the larger disturbances of the Horizontal Force at Toronto is regulated by periodical laws. The amount of disturbance is systematically greater at all the

hours from 10 P.M. to 10 A.M. inclusive, than at any hour from 11 A.M. to 9 P.M. inclusive. The ratios are equal to or above unity from 10 P.M. to 10 A.M. inclusive, and below unity from 11 A.M. to 9 P.M. inclusive. The maximum is at 2 A.M., and the minimum intermediately between 2 and 6 P.M., during which latter hours there is but little variation in the amount. There is also a secondary maximum about 7 or 8 A.M., preceded by a secondary minimum at 5 or 6 A.M. In the year ending June 1848 (but for that year only,) the secondary maximum at 7 A.M. was greater than at 2 A.M. (the usual hour of the principal maximum,) or than at any other hour in that year; this circumstance is chiefly due to the great disturbances which occurred in December 1847.

Tables VIII. and IX. exhibit the aggregate hourly values in the different years separated into disturbances increasing the force and disturbances decreasing the force; with the ratios at each hour to the respective mean hourly values.

TABLE VIII.  
*Disturbances increasing the Force.*

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	15'5	—	55'9	17'3	103'1	191'8	0'38	6 a.m.
19	45'5	—	—	16'2	54'3	116'0	0'23	7 a.m.
20	18'2	19'1	28'8	37'0	65'4	168'5	0'33	8 a.m.
21	86'6	87'5	118'3	32'6	147'5	472'5	0'91	9 a.m.
22	231'5	151'7	87'4	80'4	181'7	732'7	1'46	10 a.m.
23	203'9	138'7	89'8	173'9	351'2	957'5	1'90	11 a.m.
0	185'7	159'9	104'5	125'0	345'0	920'1	1'83	Noon.
1	158'0	99'1	123'3	74'4	331'4	796'2	1'57	1 p.m.
2	210'6	130'1	171'4	210'0	434'0	1156'1	2'30	2 p.m.
3	80'9	52'4	112'2	305'3	448'5	999'3	2'00	3 p.m.
4	189'4	17'6	227'6	292'6	530'4	1257'6	2'50	4 p.m.
5	183'9	53'2	117'8	381'9	374'2	1111'0	2'20	5 p.m.
6	72'5	—	82'7	150'6	131'7	437'5	0'85	6 p.m.
7	17'3	17'1	70'1	62'5	609'8	776'8	1'55	7 p.m.
8	31'4	50'5	66'2	26'5	362'8	537'4	1'07	8 p.m.
9	51'9	18'2	18'7	104'7	123'5	317'0	0'63	9 p.m.
10	92'8	55'7	—	93'7	101'0	343'2	0'68	10 p.m.
11	14'6	36'5	—	46'1	105'1	202'3	0'40	11 p.m.
12	—	49'2	30'6	36'3	100'2	216'3	0'44	Midnight.
13	—	—	—	66'0	50'9	116'9	0'23	1 a.m.
14	—	—	—	—	17'4	17'4	0'03	2 a.m.
15	28'3	—	—	35'0	14'9	78'2	0'16	3 a.m.
16	15'3	—	15'0	—	—	30'3	0'06	4 a.m.
17	30'1	—	32'5	17'8	31'5	111'9	0'22	5 a.m.
Total in the five years						- - -	12054'5	
Mean hourly value						$\frac{12054}{24} =$	502'2 = 1'00	

TABLE IX.

*Disturbances decreasing the Force.*

Toronto Astro- nomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
11.								11.
18	320'1	201'8	141'9	861'8	2160'8	3689'4	1'15	6 a.m.
19	240'8	273'2	210'8	844'4	3453'6	5022'8	1'57	7 a.m.
20	160'4	152'4	268'7	679'0	2888'3	4148'8	1'30	8 a.m.
21	247'9	230'0	345'3	695'9	2055'5	3574'6	1'12	9 a.m.
22	331'8	294'5	323'9	689'8	1333'6	2973'6	0'93	10 a.m.
23	274'1	240'1	310'1	450'9	1219'0	2491'2	0'78	11 a.m.
0	290'2	270'0	267'8	481'5	1048'6	2358'1	0'74	Noon.
1	236'0	176'6	346'8	339'3	918'2	2016'9	0'63	1 p.m.
2	181'5	131'6	70'9	330'5	585'2	1305'7	0'41	2 p.m.
3	207'8	178'9	256'8	243'3	567'3	1454'1	0'46	3 p.m.
4	156'1	123'9	100'0	230'1	399'0	1009'1	0'31	4 p.m.
5	237'4	269'4	141'6	247'1	527'9	1424'7	0'45	5 p.m.
6	295'4	187'9	243'7	366'9	613'0	1736'9	0'54	6 p.m.
7	336'4	333'9	189'2	418'0	746'0	2023'5	0'63	7 p.m.
8	313'2	312'7	367'4	488'8	748'3	2230'4	0'70	8 p.m.
9	407'1	348'1	485'9	907'8	845'0	2901'9	0'94	9 p.m.
10	403'9	378'3	622'5	839'5	1221'1	3167'3	1'09	10 p.m.
11	307'7	248'6	556'9	1141'6	1746'6	4001'4	1'25	11 p.m.
12	293'8	487'8	594'7	954'2	2147'3	4477'8	1'40	Midnight.
13	366'1	544'9	544'8	1547'6	2546'9	5550'3	1'73	1 a.m.
14	399'9	458'1	464'5	1463'2	3138'3	5924'0	1'86	2 a.m.
15	220'2	390'3	532'0	1418'3	2412'6	4973'4	1'56	3 a.m.
16	197'5	311'4	302'1	938'6	2430'0	4179'6	1'31	4 a.m.
17	226'2	362'5	220'1	736'2	2107'7	3652'7	1'14	5 a.m.
Total in the five years						76681'2		
Mean hourly value						$\frac{76681}{24} =$	3195'0 = 1'00	

We perceive by these tables that both the disturbances which increase and those which decrease the force are governed in respect to their frequency and amount by periodical laws depending on the solar hours, and that the laws are different in the two cases. The disturbances which increase the force have a maximum at 4 P.M., and a minimum from 2 to 4 A.M. There are also secondary maxima at 11 A.M., at 2 P.M., and at 7 P.M.; and secondary minima at 1, 3, and 6 P.M., unless we may regard these secondary maxima and minima as accidents which would disappear on a longer continuance of the observations.

From 10 A.M. to 8 P.M. inclusive the ratios are with a single exception above unity and from 9 P.M. to 9 A.M. inclusive without an exception below unity. It is in the hours

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Midnight.  
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4 a.m.  
5 a.m.



of the day, consequently, that the disturbances which increase the force have their greatest prevalence, whilst the hours of the night are comparatively tranquil. The converse law holds in regard to the disturbances which decrease the force; from 10 P.M. to 9 A.M. the ratios exceed unity at every hour, and from 10 A.M. to 9 P.M. they are uniformly less than unity. The maximum is at 2 A.M. and the minimum at 4 P.M. The continuous progression from the maximum to the minimum, and from the minimum to the maximum, undergoes an interruption of very marked character at 7 and 8 A.M., constituting a very decided secondary maximum in the disturbances which increase the force at those hours, which hours are not distinguished by any peculiarity in the disturbances of opposite character.

The table which follows (Table X., pp. xviii to xxi) shows the normal values finally adopted, the periods for which they have been employed, and the periods from which they have been derived. This table is the result of careful consideration; and is presented, not alone as one of the steps by which the conclusions arrived at in this volume have been obtained, but as a means of rendering the whole body of the Bifilar Observations in the five years more valuable for future enquiries than they would be without a table of this kind. Possessed of a table containing an approximate normal reading for every day and every hour, the inquirer has it in his power, by a simple comparison of the observations in the monthly tables, with the table of normals, to ascertain the state of the Horizontal Force relatively to its mean value on any particular day or hour to which his attention may be directed; he will have in such case only to correct the tabular scale reading in the monthly table to the standard temperature of  $55^{\circ}$ , by the aid of the coefficient 1.63 as the equivalent of  $1^{\circ}$  of Fahrenheit.

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TABLE X.

*Hourly Means of the Readings of the Bipolar Magnetometer, reduced to an uniform Temperature of 55° Fahrenheit; omitting disturbed Observations in which the Amount of Disturbance equalled or exceeded 14 Scale Divisions or about .0012 parts of the whole Horizontal Force at Toronto.*



HORIZONTAL FORCE: TABLE OF NORMALS.

xix

TABLE X.

Temperature of  
air .0012 parts

55° Fahrenheit; omitting disturbed Observations in which the Amount of Disturbance equals, or  
of the whole Horizontal Force at Toronto.

GÖTTINGEN HOURS.												Periods from which the Hourly Means are derived.		
10	11	12	13	14	15	16	17	18	19	20	21		22	23
TORONTO HOURS.														
4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
446'6	447'2	446'6	446'6	444'3	443'9	445'2	444'9	445'5	445'4	447'0	446'1	449'4	448'7	1842:
456'2	458'4	459'1	458'1	456'8	455'6	454'8	454'2	454'5	455'8	454'0	455'7	457'0	458'4	Oct. 1 to 31.
462'6	463'7	463'4	462'5	461'0	459'8	459'4	458'5	458'6	459'0	460'0	460'0	461'7	463'4	Nov. 1 to 26.
469'0	469'0	467'7	467'0	465'2	464'1	461'0	462'8	462'7	463'0	465'2	461'2	466'4	468'3	Nov. and Dec.
														Dec. 1 to 31.
466'7	465'2	461'4	463'4	462'9	461'5	461'2	461'1	461'1	461'7	462'3	463'3	464'8	465'9	1843:
473'5	473'5	471'3	465'8	465'7	466'7	466'7	465'4	467'3	467'3	466'6	466'8	469'1	468'2	Jan. 1 to 31.
919'0	916'8	916'9	914'7	910'5	911'0	909'0	907'5	905'8	906'9	906'7	906'8	904'7	902'5	Feb. 1 to 9.
960'1	959'3	936'7	936'4	933'2	931'5	929'2	930'5	929'6	928'3	929'2	929'2	928'0	928'0	July 2 to 15.
979'6	979'4	958'8	957'6	953'6	953'6	952'6	951'4	950'8	949'9	951'8	950'2	949'3	947'0	July 16 to 29.
995'4	992'9	976'4	973'9	973'6	971'9	970'7	971'1	969'6	968'2	970'0	969'2	966'7	967'1	July 30 to Aug. 12.
1006'2	1001'1	991'0	990'8	990'5	989'0	987'7	986'8	986'2	986'9	986'5	984'6	986'5	985'5	Aug. 13 to 26.
1016'9	1015'2	1001'6	1000'4	997'6	997'8	997'2	997'0	997'6	998'0	997'5	996'6	998'5	998'7	Aug. 27 to Sept. 16.
492'2	492'2	1012'2	1009'4	1004'7	1006'6	1006'6	1007'2	1009'0	1009'2	1008'5	1008'5	1010'5	1011'9	Sept. 1 to 30.
497'6	498'4	490'3	490'1	489'4	488'7	487'4	486'0	485'6	488'0	487'5	487'9	489'0	489'8	Sept. 21 to 30.
500'0	499'7	497'5	496'5	491'7	491'9	493'1	492'7	493'5	492'9	494'0	493'3	494'3	495'8	Oct. 2 to 31.
		499'8	498'0	497'7	497'5	496'5	496'3	496'6	497'4	497'6	497'8	498'9	499'6	Nov. 1 to 30.
														Dec. 1 to 31.
502'0	501'9	500'7	500'2	500'5	498'6	497'9	497'8	497'1	497'3	497'4	498'3	499'1	499'6	1844:
506'7	505'9	505'8	505'2	504'1	501'3	502'8	502'8	502'7	500'8	500'6	501'3	502'0	503'0	Jan. 1 to 31.
501'5	501'1	503'9	503'4	502'4	502'8	501'2	500'7	500'3	500'5	500'3	500'4	501'5	502'9	Feb. 9 to 29.
508'0	518'8	507'6	505'3	501'9	501'5	502'0	500'5	501'1	501'0	501'0	501'1	503'7	504'2	March 1 to 31.
513'6	514'5	511'1	508'3	506'7	505'9	507'1	504'9	504'9	501'8	505'3	505'4	507'0	507'4	April 1 to 30.
519'2	518'1	511'5	511'3	511'6	510'3	512'2	509'3	508'7	508'5	509'6	509'6	510'2	510'5	April and May.
525'0	524'5	521'3	518'9	518'4	516'8	517'2	515'5	515'3	515'3	515'4	514'9	515'0	515'6	May 1 to 31.
530'9	531'0	529'2	526'5	525'3	523'3	522'1	521'8	522'0	522'1	521'3	520'2	519'8	520'7	May and June.
537'1	536'2	533'5	531'5	529'8	528'3	527'1	527'3	527'3	527'3	525'9	525'9	525'4	526'3	June 1 to 30.
543'3	541'4	539'8	536'4	534'4	533'4	532'1	532'9	532'7	532'5	530'5	531'5	531'1	532'0	June and July.
546'4	544'5	541'5	538'9	537'2	537'3	537'0	537'8	536'3	536'5	535'6	535'4	535'0	536'0	July 1 to 31.
549'6	547'5	544'2	541'4	540'0	541'1	541'8	542'6	539'9	540'6	540'7	539'2	538'9	540'0	July and Aug.
556'6	555'3	549'1	547'4	544'6	545'2	545'7	545'7	544'0	544'5	544'5	543'9	543'6	544'6	Aug. 1 to 31.
556'8	556'7	554'0	553'4	549'2	549'3	549'6	548'7	548'2	548'3	548'4	548'6	548'4	549'2	Aug. and Sept.
557'1	558'0	551'3	553'8	551'2	551'5	551'2	550'6	550'2	550'7	549'1	550'8	551'3	551'5	Sept. 1 to 30.
557'6	558'2	554'6	554'2	553'1	553'7	552'8	552'4	552'2	553'0	549'8	552'9	554'1	553'8	Sept. and Oct.
558'2	558'3	556'0	555'8	554'7	554'2	554'0	552'6	552'3	553'3	551'6	553'2	554'2	555'4	Oct. 1 to 31.
563'0	561'8	561'1	561'2	559'4	556'5	555'5	556'7	555'1	555'2	556'5	556'7	558'1	559'9	Oct. and Nov.
														Nov. 1 to 30.
														Dec. 1 to 31.
560'2	560'1	567'4	558'7	559'7	557'7	558'7	557'8	557'2	556'7	556'8	556'5	558'1	557'4	1845:
561'8	565'7	561'0	563'5	561'6	561'3	561'8	561'0	561'4	561'0	560'8	560'6	562'7	562'8	Jan. 1 to 31.
565'9	566'8	561'0	563'7	561'7	563'7	562'4	561'4	561'9	561'3	561'0	560'9	562'5	563'1	Feb. 1 to 28.
569'4	568'3	566'9	564'7	563'7	563'4	563'5	562'9	562'4	561'2	562'5	562'6	564'7	563'8	March 1 to 31.
572'9	572'2	569'3	567'7	565'8	564'2	564'3	564'1	563'8	562'9	563'9	563'8	565'4	564'8	April 1 to 30.
576'4	576'1	571'8	570'8	568'0	565'2	565'2	566'6	565'2	564'7	565'3	565'1	566'1	565'8	April 1 to May 31.
580'3	580'0	576'4	574'4	572'1	570'2	570'0	570'1	568'9	568'4	568'8	568'6	569'5	570'0	May 1 to 31.
														May 1 to June 30.

TABLE X.—continued.

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.												12	13
	0	1	2	3	4	5	6	7	8	9	10	11		
	TORONTO HOURS.													
18	19	20	21	22	23	0	1	2	3	4	5			
1845:														
June 8 to 28 -	576'1	575'3	572'3	567'2	562'9	561'6	568'2	573'1	579'3	582'5	581'2	583'7	581'0	577
June 29 to July 5 -	577'3	576'6	574'2	568'8	565'3	565'9	570'0	575'0	580'2	583'8	585'0	584'2	582'0	579
July 6 to 26 -	578'5	578'0	575'9	570'4	567'8	567'3	571'9	577'0	581'2	585'1	585'8	584'8	582'9	581
July 27 to Aug. 2 -	581'4	578'6	576'3	571'6	569'3	570'3	575'2	580'1	585'3	586'5	589'5	587'5	586'1	583
Aug. 3 to 23 -	584'3	580'7	576'7	572'8	570'8	573'3	578'5	583'2	589'4	591'8	593'8	590'3	589'3	586
Aug. 24 to Sept. 6 -	585'9	582'7	578'3	574'6	572'2	574'6	580'3	584'9	590'6	591'8	593'2	591'0	589'8	586
Sept. 7 to 27 -	587'5	584'7	580'0	576'1	573'7	575'9	582'1	586'6	591'8	591'8	592'6	591'7	590'2	586
Sept. 28 to Oct. 4 -	589'0	588'9	585'2	582'2	580'7	581'6	586'0	588'9	592'7	592'7	594'0	591'5	591'6	589
Oct. 5 to 25 -	593'9	593'0	590'5	588'0	587'7	587'4	589'9	591'2	593'6	596'1	596'4	591'7	593'0	592
Oct. 26 to Nov. 8 -	596'0	595'4	591'5	588'5	586'9	586'2	588'2	590'6	593'7	595'8	596'5	595'5	594'7	591
Nov. 9 to 30 -	598'1	597'8	592'5	588'9	586'1	584'9	586'6	590'1	593'8	595'5	596'6	596'3	596'4	597
Dec. 1 to 31 -	596'7	597'2	597'0	593'9	591'4	589'8	587'5	589'2	591'5	596'3	598'3	598'5	596'8	595
1846:														
Jan. 1 to 31 -	597'7	597'9	596'7	594'4	589'1	586'5	586'9	591'7	595'9	601'1	602'5	602'0	600'5	598
Feb. 1 to 29 -	596'5	595'4	593'3	590'7	589'1	588'6	589'6	591'9	593'7	597'5	596'5	596'7	595'6	596
March 1 to 31 -	598'7	596'0	592'6	589'0	585'2	582'0	582'9	586'2	589'2	595'1	598'1	599'3	600'3	599
April 1 to 30 -	595'3	595'2	590'7	584'7	582'4	581'8	581'7	588'0	592'6	603'3	600'9	601'3	600'0	597
May 1 to 31 -	593'4	593'8	588'0	581'7	581'8	581'5	588'1	591'0	602'4	606'1	605'7	605'4	600'6	598
June 1 to 30 -	597'6	596'7	593'7	591'9	588'3	591'5	595'4	597'5	603'6	608'9	609'8	610'8	609'4	606
July 1 to 31 -	602'1	602'2	599'1	597'3	591'5	595'3	600'5	605'8	609'8	610'8	615'5	614'7	609'3	607
Aug. 1 to 31 -	605'6	601'4	597'7	592'3	593'7	591'1	602'3	610'5	615'0	618'1	618'1	616'2	609'5	604
Sept. 1 to 30 -	610'6	606'8	601'5	596'4	592'1	594'2	600'5	608'7	615'6	619'6	616'4	612'7	612'9	612
Oct. 1 to Nov. 1 -	613'7	610'0	605'2	600'9	598'8	597'5	600'2	604'7	608'3	611'6	614'0	612'4	612'3	613
Nov. 2 to 30 -	617'8	616'6	611'9	606'8	605'0	601'5	603'3	605'5	609'3	613'4	614'7	615'3	614'6	611
Dec. 1 to 31 -	620'6	620'1	617'1	611'8	610'7	607'0	607'0	609'8	614'8	619'4	621'2	620'6	619'5	619
1847:														
Jan. 1 to 31 -	619'2	619'2	618'8	615'6	610'8	607'3	607'7	611'0	614'9	620'5	621'1	622'1	621'8	619
Feb. 1 to 28 -	615'8	613'0	609'1	608'1	607'2	606'2	606'8	611'1	614'3	615'7	617'9	616'9	617'1	617
March 1 to 31 -	615'6	614'1	610'0	606'7	600'2	598'7	598'9	603'9	608'9	611'6	619'2	620'1	617'2	617
April 1 to 30 -	615'2	611'7	606'0	602'1	598'5	595'0	599'1	607'6	614'4	619'6	623'4	620'1	617'4	619
May 1 to 31 -	615'3	613'8	612'6	607'1	602'6	605'6	612'0	619'5	623'2	626'0	625'8	625'4	621'3	619
June 1 to 30 -	623'3	622'7	619'2	615'7	610'5	611'7	616'0	624'5	632'0	635'6	636'6	632'5	631'1	626
July 1 to 31 -	621'9	618'5	615'2	611'1	609'0	610'2	616'4	621'5	627'3	633'6	633'5	630'4	629'0	625
Aug. 1 to 31 -	623'1	621'9	615'5	610'1	607'0	606'1	611'2	617'8	627'7	632'0	632'6	632'8	628'9	627
Sept. 1 to 30 -	621'8	618'1	613'7	601'5	599'3	600'8	606'7	612'6	621'2	628'2	631'6	630'5	631'5	627
Oct. 1 to 31 -	626'1	618'9	610'9	607'9	603'4	602'5	606'9	611'5	615'0	619'1	621'9	624'5	625'9	624
Nov. 1 to 30 -	624'1	620'6	615'1	609'6	601'7	600'7	598'9	605'1	611'8	616'8	620'4	620'8	620'8	622
Dec. 1 to 31 -	629'7	628'8	627'6	623'2	617'9	611'5	614'7	616'1	617'2	618'3	622'9	624'7	627'0	623
1848:														
Jan. 1 to 31 -	621'4	623'5	621'8	622'0	608'2	601'7	602'7	608'5	611'5	620'3	626'7	625'9	624'6	621
Feb. 1 to 29 -	628'4	626'3	625'5	621'7	617'6	611'5	607'1	609'8	617'3	620'7	625'7	629'4	628'6	628
March 1 to 31 -	629'9	626'8	623'6	616'0	612'6	607'5	605'5	613'5	619'3	624'3	628'6	631'7	630'4	628
April 1 to 30 -	624'4	626'6	622'8	617'5	612'1	609'1	615'8	618'9	621'5	630'1	631'4	635'3	633'8	633
May 1 to 31 -	632'6	629'9	626'8	619'4	616'2	617'2	620'4	632'1	636'1	638'6	639'6	639'3	640'1	633
June 1 to 30 -	635'7	631'7	630'7	625'8	619'8	620'6	629'0	636'4	643'0	645'0	647'3	647'0	642'7	639

HORIZONTAL FORCE: TABLE OF NORMALS.

TABLE X.—continued.

		GÖTTINGEN HOURS.												Periods from which the Hourly Means are derived.
10	11	12	13	14	15	16	17	18	19	20	21	22	23	
TORONTO HOURS.														
4	5	6	7	8	9	10	11	12	13	14	15	16	17	
584'2	583'7	581'0	577'9	576'3	575'3	574'6	573'7	572'6	572'2	572'4	572'1	573'0	574'2	1845: June 1 to 30.
585'0	584'2	582'0	579'5	577'9	577'0	575'6	575'0	575'8	574'6	575'1	574'5	575'1	576'0	June 1 to July 31.
585'8	584'8	582'9	581'1	579'5	578'7	576'7	576'4	576'9	577'1	577'9	577'0	577'3	577'9	July 1 to 31.
589'5	587'5	586'1	583'6	582'5	582'3	581'2	580'8	580'3	580'5	580'8	580'5	579'7	581'0	July 1 to Aug. 31.
593'8	590'3	589'3	586'1	585'4	585'9	585'7	585'1	583'7	583'9	583'6	583'9	582'1	581'1	Aug. 1 to 31.
593'2	591'0	589'8	586'4	586'0	586'7	587'0	586'8	585'2	585'0	585'3	585'5	584'8	586'2	Aug. 1 to Sept. 30.
592'6	591'7	590'2	586'7	586'7	587'5	588'2	588'1	586'8	586'1	586'9	587'1	587'5	588'2	Sept. 1 to 30.
591'5	593'2	591'6	589'4	589'5	589'1	590'3	589'6	588'7	589'5	589'8	589'6	590'7	591'5	Sept. 1 to Oct. 31.
596'4	591'7	593'0	592'1	591'9	590'7	592'4	591'0	590'7	592'8	592'8	592'1	593'9	594'7	Oct. 1 to 31.
596'5	595'5	594'7	594'6	594'5	593'2	591'2	592'3	592'5	593'2	593'4	593'8	595'3	595'7	Oct. 1 to Nov. 30.
596'6	596'3	596'4	597'1	597'2	595'6	596'0	596'7	594'3	593'6	594'0	593'5	596'7	596'7	Nov. 1 to 30.
598'3	598'5	596'8	595'9	595'7	595'5	596'0	594'8	594'1	594'6	594'6	594'6	595'1	595'1	Dec. 1 to 31.
602'5	602'0	600'5	598'0	597'7	596'8	596'9	596'8	594'9	595'2	595'6	596'3	597'1	596'9	1846: Jan. 1 to 31.
596'5	596'7	595'6	596'5	596'2	595'6	594'8	596'0	594'6	594'6	595'0	595'3	595'0	594'4	Feb. 1 to 29.
598'1	599'3	600'3	599'7	598'5	597'5	598'1	597'8	596'5	596'5	597'2	597'2	598'9	597'9	March 1 to 31.
600'9	601'3	600'0	599'2	596'5	595'3	595'1	595'0	593'4	593'9	593'5	596'4	596'2	595'8	April 1 to 30.
605'7	605'4	600'6	598'6	595'6	593'2	593'9	593'2	593'2	591'0	594'0	591'7	593'1	593'7	May 1 to 31.
609'8	610'8	609'4	606'6	600'8	597'0	598'6	596'4	596'0	597'5	598'4	596'0	596'8	598'1	June 1 to 30.
615'5	614'7	609'3	607'5	600'9	603'2	602'4	600'5	599'3	601'5	601'1	600'1	600'1	600'0	July 1 to 31.
618'1	616'2	609'5	604'3	604'1	605'0	602'1	602'8	606'5	605'9	606'9	605'9	604'6	605'4	Aug. 1 to 31.
616'4	612'7	612'9	612'0	612'7	614'5	612'2	611'7	612'0	610'5	610'2	606'2	612'2	612'7	Sept. 1 to 30.
614'0	613'4	612'3	613'2	611'4	612'3	610'9	608'8	608'3	609'9	611'0	612'2	612'8	613'4	Oct. 1 to 31.
614'7	615'3	614'6	611'3	613'2	611'4	613'8	612'9	612'3	614'1	614'6	611'7	615'4	617'0	Nov. 1 to 30.
621'2	620'6	619'5	619'0	619'1	619'4	619'7	618'0	616'6	617'8	618'6	618'1	618'7	619'3	Dec. 1 to 31.
621'1	622'1	621'8	619'2	619'2	618'3	617'9	617'3	617'1	617'9	618'0	618'7	619'8	618'1	1847: Jan. 1 to 31.
617'9	616'9	617'1	617'6	616'4	617'8	616'1	615'4	615'6	615'2	614'9	616'1	616'1	617'0	Feb. 1 to 28.
619'2	620'1	617'2	617'0	616'8	615'6	614'8	614'7	615'7	612'8	612'3	613'1	613'8	614'0	March 1 to 31.
623'4	620'1	617'4	613'2	609'4	611'4	610'5	611'6	613'4	613'1	610'7	611'8	613'2	614'2	April 1 to 30.
625'8	625'4	621'3	619'8	616'9	618'2	617'0	617'3	615'7	616'4	614'4	614'2	614'2	614'4	May 1 to 31.
636'6	632'5	631'1	626'3	623'1	621'1	622'1	621'1	619'8	619'0	620'8	620'7	620'8	621'4	June 1 to 30.
633'5	630'4	629'0	625'1	625'2	623'2	621'8	623'6	620'3	621'0	619'8	619'8	619'3	619'6	July 1 to 31.
632'6	632'8	628'9	627'4	626'7	625'7	625'2	626'1	625'5	624'2	624'6	623'5	623'9	623'4	Aug. 1 to 31.
631'6	630'5	631'5	627'8	625'5	623'8	621'9	623'9	622'3	621'2	622'6	622'8	625'2	621'4	Sept. 1 to 30.
621'9	624'5	625'9	624'4	621'9	620'9	621'0	620'7	619'9	619'5	620'8	620'9	620'9	621'5	Oct. 1 to 31.
620'4	620'8	620'8	622'1	621'0	620'9	621'7	620'2	620'1	619'9	622'6	621'4	622'7	623'2	Nov. 1 to 30.
622'9	624'7	627'0	625'7	624'8	626'5	625'3	625'3	624'2	624'8	625'4	626'0	626'6	626'6	Dec. 1 to 31.
626'7	625'9	624'6	621'9	621'6	621'9	622'7	621'0	619'5	621'6	619'8	621'6	622'2	623'0	1848: Jan. 1 to 31.
625'7	629'4	628'6	628'9	628'2	628'4	627'0	625'3	624'7	623'2	626'0	626'5	626'9	628'4	Feb. 1 to 29.
628'6	631'7	630'4	628'8	627'3	625'1	625'9	626'2	626'0	625'7	627'8	627'4	628'8	627'9	March 1 to 31.
631'1	635'3	633'8	630'5	628'9	628'0	627'1	626'6	627'2	628'6	627'2	629'1	627'6	629'1	April 1 to 30.
639'6	639'3	619'1	631'6	633'2	633'4	631'9	631'7	631'8	630'1	630'6	629'8	628'6	630'0	May 1 to 31.
647'3	647'0	642'7	639'1	637'8	637'4	634'1	632'1	633'4	632'0	632'8	631'5	632'8	632'6	June 1 to 30.

## VERTICAL FORCE.

*Separation and Analysis of the larger Disturbances.*—In preparing the observations of the Vertical Force Magnetometer for the various deductions that can be made from them, the first step must be to ascertain in the most direct and practical manner, from the observations themselves, the equivalent in divisions of the Magnetometer scale to a variation of 1° of temperature. Commencing with February 1844, in the middle of which month the Magnetometer was adjusted, an unbroken series continued until the end of May in the following year, when a re-adjustment took place. From March 1844 to May 1845 inclusive, we have consequently an unbroken series of fifteen months, in which the mean monthly scale readings, with the corresponding temperatures, were as follows:—

TABLE XI.

—	Sc. Divisions.	Temperature.	Sc. Divisions.	Temperature.	—
1844. March . . .	121·8	46°·5	} 102°93	51°·5	Spring (1).
April . . .	99·0	56°·5			
May . . .	88·0	60°·5			
June . . .	75·1	61°·8	} 64°60	67°·6	Summer (2).
July . . .	60·2	69°·7			
August . . .	58·5	68°·3			
September . . .	61·4	65°·1	} 80°03	55°·2	Autumn (3).
October . . .	83°·6	53°·4			
November . . .	95°·1	47°·1			
December . . .	101°·1	42°·7	} 97°97	42°·77	Winter (4).
1845. January . . .	99°·5	42°·7			
February . . .	93°·3	42°·9			
March . . .	82°·9	48°·0	} 71°20	53°·67	Spring (5).
April . . .	72°·1	53°·6			
May . . .	58°·6	59°·4			

From the difference in the mean scale reading in the spring quarters of 1844 and 1845 ( $102·93 - 71·20 = 31·73$ ) in which quarters the temperatures were nearly the same, we may infer that a considerable change took place in the scale readings during this interval from other causes than changes in the earth's magnetism; variations depending on particular periods of the year can have no place, since the seasons compared are the same, and any secular change which could be reasonably imagined must have been far less considerable. We must, therefore, attribute this decrease of 31·73 scale divisions occurring in one year principally, if not wholly, to instrumental causes.

On a comparison of the *monthly* scale readings each with the others we further find reason to believe that the decrease thus occasioned was progressive during the whole interval, though not always to an uniform amount. Under these circumstances, perhaps the best mode of combining these five quarterly results with the view of

eliminating periodical and secular variations, and, as far as may be, instrumental error, and of thereby obtaining the effect of temperature, is to mean the results in the spring and autumn of 1844 (Nos. 1 and 3), and compare their mean with the intermediate summer (No. 2); and in like manner to mean the results of the autumn of 1844 and spring of 1845 (Nos. 3 and 5), and compare their mean with the intermediate winter (No. 4); and then to take a mean of the results of these two comparisons: these are stated in the following table:

TABLE XII.

	Difference of Temperature.	Difference of Scale Readings.	Equivalent to a Variation of 1° Fahr.
From (1) and (3) compared with (2) we have	12.75	26.85	2.10
From (3) and (5) compared with (4) we have	11.65	22.40	1.92

If we could regard these comparisons as sufficient of themselves to give a final result, we should only have to take the mean between them, 2.01, in which we might consider that any subsisting periodical and secular variations were eliminated. But the shortness of the period during which the series was unbroken, together with the magnitude and irregularity of the change from instrumental causes, will not permit us to rest in this as a final result, and we are led to seek for further evidence.

In examining the *monthly tables* in which the Vertical Force Observations from March 1844 to May 1845 inclusive are contained (Toronto Observations, vol. 2, pp. 224-243, 404-413), we find several instances in which the temperature of days very near to each other differed very considerably, and when consequently the effect of a change of temperature on the indications of the magnetometer can be examined with advantage. In choosing amongst these, it is obvious that the shorter the interval between the observations compared, the less the result is likely to be affected by the instrumental change which has been adverted to; and those instances are to be preferred in which a high temperature may be found between two nearly equidistant low temperatures, or a low temperature between two nearly equidistant high ones; provided that the condition of proximity be tolerably preserved, and that care be taken to avoid times of considerable magnetic disturbance. The following table presents a selection of instances made on these principles, with the results which they give individually and collectively:—



TABLE XIII.

DATES.	Mean Temperature.	Mean Scale Readings.	Differences.		Equivalent to a Variation of 1° Fahr.	
			Temperature.	Readings.		
1844. March	12 and 13 -	50°77	} 10°67	Sc. Div. 17°72	Sc. Div. 1°66	
	18 and 19 -	39°46				
	25 and 26 -	49°50				
1844. May	20 to 22 -	56°63	} 8°84	15°53	1°79	
	27 to 28 -	66°55				
	June 10 and 11 -	58°80				
1844. September	16 to 20 -	71°47	} 15°52	29°02	1°87	
	23 to 27 -	55°95				
	21 and 22 -	50°80				
1844. October	24 and 25 -	57°21	} 9°29	16°74	1°80	
	28 to 31 -	45°05				
	1844. October	28 to 31 -				45°05
November	4 to 8 -	50°69				
25 to 28 -	39°25					
1844. November	25 to 28 -	39°25	} 7°41	13°68	1°70	
	December	2 to 6 -				46°30
	16 to 20 -	38°52				
1845. January	23 to 25 -	47°29	} 14°39	25°09	1°74	
	February	1 to 7 -				31°44
	21 to 26 -	50°37				
1845. March	11 to 13 -	48°51	} 9°50	17°68	1°86	
	17 to 19 -	41°38				
	26 to 28 -	53°22				
1845. May	7 and 8 -	54°10	} 13°27	25°55	1°93	
	12 and 13 -	68°67				
	15 and 16 -	56°70				
Collectively -			97°43	171°03	1°78	

From this table we have 1°78 as the equivalent in scale divisions to a variation of 1° temperature: or if we combine this with the result previously obtained from the five quarterly means (page xxiii), we have  $\frac{174.03 + 49.25}{97.43 + 24.38} = \frac{223.28}{121.81} = 1.83$  sc. divisions, as the equivalent of 1°. The value adopted for the portion of the observations from March 1844 to May 1845 inclusive has been 1°80.

From June 1845 to August 1845 inclusive, and from September 1845 to March 1846, the Vertical Force Observations form two series, the break between them occurring at the end of August; each series is therefore of only a few months' duration. At the end of March 1846, the magnet was removed from the Magnetometer, remagnetised, and mounted afresh. The time of Horizontal Vibration, which had been previously 11°50, was reduced by the stronger magnetic charge imparted to the needle to 10°29 observed on 1st of April 1846; which was only increased to 10°36 when again observed on February 28th, 1849. The series of observations which was commenced in April 1846 continued without interruption to the close of the hourly observations in

June 1848, forming an unbroken series of twenty-seven months; and for this period it will be necessary to examine afresh the equivalent in scale divisions to a change of 1° of temperature, inasmuch as the equivalent must be expected to be slightly modified by the increased magnetism of the needle.

The mean monthly scale readings, with the corresponding temperatures, are as follow, and are collected in quarterly values:—

TABLE XIV.

Dates.	Scale Readings.	Temperature.	Quarterly Means.		Seasons.
			Readings.	Temperature.	
1846. April - -	213.0	51.7	} 199.3	62.0	Spring (1).
May - -	198.3	62.8			
June - -	185.7	68.6			
July - -	173.7	73.6	} 173.5	72.3	Summer (2).
August - -	170.8	73.7			
September - -	175.9	69.5			
October - -	197.1	56.6	} 202.6	50.8	Autumn (3).
November - -	200.6	52.8			
December - -	210.2	43.0			
1847. January - -	209.0	40.3	} 204.4	42.4	Winter (4).
February - -	203.4	42.3			
March - -	200.7	41.6			
April - -	188.9	51.4	} 174.2	58.5	Spring (5).
May - -	171.8	60.3			
June - -	161.9	63.9			
July - -	143.1	73.0	} 149.8	68.6	Summer (6).
August - -	145.4	70.4			
September - -	160.8	62.4			
October - -	172.5	56.1	} 180.2	51.0	Autumn (7).
November - -	179.8	51.6			
December - -	188.3	45.2			
1848. January - -	187.2	43.4	} 182.5	44.3	Winter (8).
February - -	182.5	43.9			
March - -	177.7	46.7			
April - -	167.9	53.3	} 149.5	61.0	Spring (9).
May - -	148.9	61.5			
June - -	133.7	68.2			

By comparing with each other similar seasons in different years, and thus eliminating periodical variations, whilst, at the same time, we have the temperatures approximately the same, we find that during this period, independently of changes from other causes, a progressive decrease took place in the scale readings which did not greatly differ from an uniform decrease. Without entering at present into the question of the cause of this decrease, let  $x$  = its amount taken from quarter to quarter, assumed to be uniform, and counted from the middle quarter (April, May, and June, 1847), and let  $y$  = the equivalent in scale readings for a change of temperature of 1°. Then each quarter will furnish an equation towards the values of  $x$  and  $y$ ; and by least squares we find the most probable value of  $x$  to be 6.43, and of  $y$  1.64, the coefficient of  $x$  being positive in the quarters antecedent to April, May, and June, 1847, and negative in the

subsequent quarters; and the coefficient of  $y$  positive when the temperature is above  $56^{\circ}\cdot 7$  (the arithmetical mean of the temperatures of the nine quarters), and negative when it is less than  $56^{\circ}\cdot 7$ .

Comparing the summer and winter quarters, or the quarters in which the differences of temperature are greatest, we have as follows:—

	Differences.		Equivalent of $1^{\circ}$ .
	Scale Readings.	Temperature.	
Summer and Winter	- { (2) and (6) with (4)	42'75	} $\frac{86'4}{53'3} = 1'62$
	- { (4) and (8) with (6)	43'65	

Comparing also the spring and autumn quarters alternately with summer and with winter, we have as follows:—

	Differences.		Equivalent of $1^{\circ}$ .
	Scale Readings.	Temperature.	
Spring and Autumn with Summer,	(1) and (3) with (2) -	27'45	} $\frac{88'5}{53'7} = 1'65$
"	Winter, (3) and (5) with (4) -	16'00	
"	Summer, (5) and (7) with (6) -	27'40	
"	Winter, (7) and (9) with (8) -	17'65	

The equivalent to  $1^{\circ}$  of temperature appears, therefore, to have been somewhat less in the period from April 1846 to June 1848 than in the period from March 1844 to May 1845; between these periods the needle had been re-magnetized, and its magnetic force increased, the times of Horizontal and Vertical vibration being slightly affected thereby (Toronto, vol. II. p. lxi). The ratio of the times of Horizontal and Vertical vibration being one of the elements upon which the change in the scale readings, corresponding to changes of temperature, depends, we should be prepared to expect that the amount of the equivalent to  $1^{\circ}$  of temperature would not be exactly the same before and after the re-magnetization, but that the equivalent would be slightly diminished in amount when the magnetic charge of the needle was increased. The two values, 1'80 and 1'64, differ from each other in the direction, and very nearly to the amount which might be expected from the change effected in the times of Horizontal and Vertical vibration. The results may be considered, therefore, as being each approximately corroborative of the other.

The value of the Scale-coefficient,  $k$ , computed according to the Instructions of the Royal Society, varied in different months between March 1844 and May 1845 from '000060 to '000065 parts of the Vertical Force, the mean being '0000628; and between April 1846

and June 1848 from '000065 to '000067, the mean being '0000658. Thence we should have, *theoretically*, the change in the magnetic moment of the needle corresponding to 1° of Fahrenheit,  $'0000628 \times 1.80 = '000113$  for the first period, and  $'0000658 \times 1.64 = '000103$  for the second period. There were two attempts made to obtain the change in the magnetic moment by direct experiment, one at the end of 1843 and beginning of 1844, of which the particulars are related in the Toronto Observations, vol. I. pp. liii-lvii, the result being '000112; and a second in March and April 1846, of which the particulars are given in vol. II, pp. lxii-lxiii, and of which the result was '00007. The result of the experiments in 1843 and 1844 ('000112) is in remarkable accord with the deduction obtained by the present investigation, '0001105 (mean of '000113 and '000108). The partial results in the second series, viz., in March and April 1846, accord better with each other than do those of 1843-1844; but it is possible that there may have been some accidental oversight causing an error which may have pervaded the whole. The needle itself has been since transferred, by direction of Her Majesty's Government, to the provincial authorities of Canada, and remains at Toronto in what is now a provincial observatory; it has not been possible, therefore, to repeat the direct experiments on its magnetic moment at Woolwich, which would otherwise have been done. It would have been satisfactory to have *proved* by this means, what is, however, extremely probable, that in the case of the Vertical Force needle the method of determining the temperature equivalent prescribed in the Instructions, and that which has been here adopted, of deriving it from the observations themselves, lead to an identical conclusion.

The separation and analysis of the larger disturbances of the Vertical Force has been conducted on the same principle as in the case of the larger disturbances of the Horizontal Force. As the first step, the whole of the observations were reduced individually to an uniform temperature of 55°, employing the coefficients named in the preceding pages. The *mean* scale division was then computed for every hour in each of the sixty months; and the correctness of the whole work was examined by the correspondence of two computers, and by the agreement of these hourly means with the hourly means printed in the monthly tables, when the latter were reduced to the standard temperature of 55° by the application in each case of the correction due to the difference between the recorded temperature and 55°. The hourly means thus corrected in each month presented to the eye at the different hours the diurnal variation of the Vertical Force, cleared from the influence of temperature on the magnetism of the bar, but retaining whatever effects may have been due to disturbances. For the purpose of eliminating the disturbances of largest amount, the observations which had been individually corrected for temperature were compared each with the monthly mean, at the same temperature, hour, and month, and every observation which differed 4.0 scale divisions or more from that mean was provisionally marked as a disturbed observation.

Fresh means for each hour in each month were then taken omitting the observations marked as disturbed, and the means thus obtained were then used as standards of comparison for a second examination. This process was repeated until the "hourly means" were strictly the means of all the remaining observations, after the separation of those which differed from them respectively by four scale divisions or more. (The value of four scale divisions in parts of the Vertical Force at Toronto was .00026.)

When the larger disturbances are thus separated, the diurnal variation at the same period of the year, in different years, exhibits a very satisfactory accordance; and, by the process of elimination which has been explained, it is probable that the diurnal variation has very little, if any, influence in the determination of the observations separated as disturbed.

A much greater practical difficulty was occasioned by a circumstance already noticed in discussing the temperature coefficient; namely, the progressive decrease in the scale readings from instrumental causes, and possibly also in part from secular change. Whenever the amount of decrease in the course of a month was seen to be such as to interfere with the proper comparability of the observations in any part of the month with the means taken in the usual manner, fresh means more suitable for the comparison were formed; thus, for example, for the observations in the last week of one month, and the first week of the next, it has in some instances appeared preferable to form the hourly means for comparison from the whole of the observations of the two months united, instead of from each month separately, whereby the advantage is gained that the period which furnishes the standard of comparison for the fortnight in question extends to a nearly equal distance on either side of the observations compared with it. In a few instances in which the decrease was more irregular than was commonly the case, fortnightly means, and even, when absolutely required, weekly means, were substituted for the monthly or two-monthly means. This part of the process requires an attentive preliminary consideration and study of the observations, and it is important that it should be carefully executed, because normal values, however obtained, form an essential basis for the study of all the terrestrial magnetic variations. To facilitate researches of this nature, in which the observations contained in these volumes may hereafter be employed, as well as to show the steps by which the conclusions now submitted have been arrived at, a table of the hourly means of the readings of the Vertical Force Magnetometer reduced to 55° Fahrenheit, and omitting the observations in which the amount of disturbance equalled or exceeded four scale divisions (or .00026 parts of the whole Vertical Force at Toronto), is subjoined, (pp. xxxviii to xli) specifying in each case the interval to which the normal values correspond, as well as the interval comprehended by the observations from which they are derived.

The period which these normal values comprise is one of five complete years, terminating on the 30th June 1848. It is not, however, an absolutely unbroken period, as in October 1843 the magnet of the Vertical Force Magnetometer was displaced from



Table XVII. exhibits the aggregate values in the different years, divided into disturbances increasing the force and disturbances diminishing the force.

TABLE XVII.

Year ending June, 1844	Increasing.		Decreasing.		Scale Divisions.
1844	-	-	3174.2	-	3834.3
" " 1845	-	-	2061.2	-	4139.9
" " 1846	-	-	3356.1	-	4483.0
" " 1847	-	-	4372.9	-	8682.8
" " 1848	-	-	9298.3	-	9863.2
Sums in the five years	-	-	22262.7	-	31003.2

It appears from this table that the average operation of the disturbances of larger amount at Toronto is to diminish the Vertical Force more than to increase it. The ratio of the disturbances diminishing the force to those which increased it, on the average of the five years, was nearly as 1.4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the several *months* of their occurrence, with the ratios which the values in the preceding columns bear to the mean monthly value or average of all the months.

TABLE XVIII.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July	527.3	351.1	562.3	1403.8	637.5	3485.0	0.71	July.
August	281.5	765.1	808.1	2075.1	880.8	4805.6	1.08	August.
September	536.9	1115.0	625.2	2369.5	2434.1	7081.0	1.60	September.
October	489.9	1017.1	463.3	1125.7	2663.6	5759.6	1.29	October.
November	589.7	666.1	524.8	498.3	1138.2	3327.1	0.75	November.
December	794.7	198.6	659.4	149.3	2611.3	4413.3	1.00	December.
January	381.3	652.2	301.7	313.0	841.1	2492.3	0.56	January.
February	72.8	316.8	266.7	508.0	2093.0	3287.3	0.74	February.
March	1283.7	345.1	374.3	1163.2	1619.6	4785.9	1.08	March.
April	1374.4	249.5	1048.3	2031.5	1901.7	6698.4	1.49	April.
May	490.5	382.7	1347.2	1084.9	1683.1	4985.4	1.12	May.
June	182.8	116.8	857.8	420.4	657.2	2235.0	0.50	June.
Total in the five years						-	53265.9	
Mean monthly value,						$\frac{53265.9}{12} =$	4438.8	= 1.00

April and September are the months of maximum disturbance, and January and June the months of minimum disturbance. The progression from the maxima to the minima, and *vice versa*, is continuous with the exception of December, an exception manifestly caused by the occurrence of excessive disturbance in December 1847. If the year ending June 30, 1848, be omitted, the ratios of the disturbances in the months of December and January respectively, to the mean monthly disturbance in the remaining four years are, December 0·63 and January 0·58. On the whole, therefore, we may conclude, that in the disturbances of the Vertical Force, as in the Declination and Horizontal Force, the maxima occur at or about the equinoxes, and the minima at or about the solstices. The values of the disturbances at the equinoxes are to those at the solstices in the ratio of nearly 3 to 1.

Tables XIX. and XX. exhibit the aggregate monthly values in the different years, separated into disturbances increasing the force, and disturbances decreasing the force.

TABLE XIX.

*Disturbances increasing the Force.*

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - -	211'0	25'7	153'3	362'3	279'5	1034'8	0'55	July.
August -	83'2	281'3	236'1	442'0	363'1	1408'7	0'76	August.
September -	309'2	149'1	133'1	779'5	1395'5	2766'4	1'49	September.
October -	256'5	278'5	278'7	344'0	1151'2	2308'9	1'25	October.
November -	245'8	250'2	61'2	137'7	828'4	1525'3	0'82	November.
December -	685'3	126'7	454'2	117'2	1356'1	2739'5	1'48	December.
January -	144'9	460'4	110'3	232'5	368'3	1316'4	0'71	January.
February -	58'1	88'0	60'5	268'8	958'1	1433'5	0'77	February.
March - -	506'8	159'9	208'1	587'9	782'1	2244'8	1'21	March.
April - -	95'9	109'9	679'2	637'6	790'1	2712'7	1'46	April.
May - -	128'2	95'1	656'1	227'6	722'4	1829'4	0'90	May.
June - -	46'3	33'4	323'3	235'8	303'5	942'3	0'51	June.
Total in the five years - -						22262'7		
Mean monthly value, $\frac{22263}{12} =$						1855'2 =	1'00	



TABLE XX.

*Disturbances decreasing the Force.*

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - -	Sc. Div. 313'3	Sc. Div. 325'4	Sc. Div. 400'0	Sc. Div. 1044'5	Sc. Div. 358'0	2450'2	0'95	July.
August - -	198'3	475'8	572'0	1633'1	517'7	3396'9	1'31	August.
September - -	227'7	965'9	492'1	1590'0	1038'9	4314'6	1'65	September.
October - -	233'4	738'6	184'6	781'7	1512'4	3450'7	1'33	October.
November - -	343'9	415'9	461'6	270'6	309'8	1801'8	0'68	November.
December - -	109'4	71'9	205'2	32'1	1255'2	1673'8	0'63	December.
January - -	239'4	191'8	191'4	80'5	472'8	1175'9	0'45	January.
February - -	14'7	258'8	206'2	239'2	1134'9	1853'8	0'69	February.
March - -	776'9	185'2	166'2	575'3	837'5	2541'1	0'98	March.
April - -	878'5	139'6	369'1	1396'9	1111'6	3895'7	1'55	April.
May - -	362'3	287'6	691'1	854'3	960'7	3156'0	1'22	May.
June - -	136'5	83'4	534'5	181'6	353'7	1292'7	0'50	June.
Total in the five years - -						31003'2		
Mean monthly value, $\frac{31003'2}{12} =$						2583'6 =	1'00	

It is seen by Tables XIX. and XX. that the values of the disturbances which increase the force, and of those which decrease the force, follow, in their ratios to their respective mean monthly values, the same general law as that obtained from their conjoint consideration in the remarks on Table XVIII. The equinoxes are the epochs of maxima, and the solstices of minima.

It has been seen in page xxx. that, on the average of the whole year, the disturbances which decrease the force preponderate in value over those which increase the force in the ratio of 1'4 to 1'0. This preponderance, however, appears to be subject to a periodical variation, and to have a maximum about the time of the northern solstice, and a minimum at the opposite period of the year. This variation is of considerable amount; and though the number of years (five) over which the series of observations extends is insufficient to give its progression with great regularity, it is still quite sufficient to indicate the general fact of the existence of such a variation, and to point it out as worthy of a more extensive examination. Table XXI. exhibits the ratios in the different months of the values of the disturbances decreasing the force to those which increase it, the latter being taken throughout as the units.

TABLE XXI.

Ratios of the Values of the Disturbances decreasing the Vertical Force in the different Months to the Value of those which increase it.

Months.	Ratios.	Months.	Ratios.
July - - -	2'33	January - - -	0'89
August - - -	2'41	February - - -	1'29
September - - -	1'56	March - - -	1'13
October - - -	1'49	April - - -	1'43
November - - -	1'18	May - - -	1'72
December - - -	0'61	June - - -	1'37

In December and January the preponderance of the decreasing values ceases, and increasing values preponderate. If we combine in one view the north-solstitial months of May, June, and July, the mean ratio is 1·8 to 1·0. In the opposite part of the year (combining November, December, and January in one view,) the preponderance is reversed, the mean ratio being as 0·83 to 1·0. In the comparison of the values of the easterly and westerly disturbances of the Declination at Toronto (Toronto Observations, vol. II. p.xxvii), we have the evidence of an analogous periodical variation existing in that element. In the north-solstitial months, easterly disturbances preponderate, and in the south-solstitial months westerly predominate. In the analogy thus traced the predominance of easterly disturbances of the Declination ranges itself with the predominance of disturbances which decrease the Vertical Force, and the predominance of westerly disturbances of the Declination with that of disturbances which increase the Vertical Force.

On comparing with each other the periodical affections of the Vertical Force in the different months which have been thus brought into notice, we find that in the sums of the values of the *whole* disturbances (when those which decrease are combined with those which increase the force) the equinoctial months are the epochs of maximum disturbance, and the solstitial months epochs of minimum disturbance; whilst in the periodical variation of the ratios of the disturbances of opposite character to each other (*viz.*, those which decrease and those which increase the force,) the extreme dissimilarity takes place at or near the solstitial epochs, whilst the equinoctial epochs hold a middle place. In both these respects the analogy holds in respect to the disturbances of the Declination.

Table XXII. exhibits the aggregate values of the disturbed observations, distributed into the several *hours* of their occurrence, together with the ratios of the values at the different hours to the mean hourly value or average of all the hours.

TABLE XXII.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.	
	1844.	1845.	1846.	1847.	1848.				
h.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		h.	
18	398'3	363'5	306'8	633'0	994'9	2696'5	1'21	6 a.m.	
19	365'7	241'9	245'3	563'7	1149'8	2566'4	1'15	7 a.m.	
20	273'7	188'6	262'5	455'4	598'4	1778'6	0'80	8 a.m.	
21	207'8	109'3	129'7	261'4	483'4	1191'6	0'51	9 a.m.	
22	183'6	57'3	111'7	131'5	329'0	813'5	0'36	10 a.m.	
23	112'8	65'3	102'0	120'0	355'8	755'9	0'31	11 a.m.	
0	145'1	58'2	188'1	191'3	454'6	1037'3	0'46	Noon.	
1	207'7	106'6	219'4	305'6	555'1	1400'1	0'63	1 p.m.	
2	213'1	159'0	260'6	342'9	720'8	1704'4	0'77	2 p.m.	
3	221'1	160'6	317'2	512'1	716'3	1944'1	0'87	3 p.m.	
4	290'4	200'7	439'0	510'9	884'4	2325'4	1'01	4 p.m.	
5	342'4	260'4	397'5	522'2	864'6	2387'1	1'07	5 p.m.	
6	329'0	228'8	369'1	556'5	757'2	2210'6	1'01	6 p.m.	
7	319'6	244'6	302'0	517'5	885'3	2339'0	1'05	7 p.m.	
8	274'7	223'2	256'6	433'8	789'2	1977'5	0'89	8 p.m.	
9	201'2	196'7	291'5	361'6	602'4	1656'4	0'74	9 p.m.	
10	245'4	181'0	283'9	615'9	539'6	1895'8	0'85	10 p.m.	
11	277'7	227'9	314'9	585'0	660'2	2065'7	0'93	11 p.m.	
12	401'0	484'1	467'5	784'0	957'6	3094'2	1'39	Midnight.	
13	366'5	469'5	486'2	1032'1	1161'9	3516'2	1'58	1 a.m.	
14	373'3	520'4	537'5	961'5	1171'4	3564'1	1'61	2 a.m.	
15	421'0	566'2	591'1	991'7	1273'1	3846'1	1'73	3 a.m.	
16	291'8	458'4	555'1	931'9	1099'6	3342'8	1'51	4 a.m.	
17	439'4	428'9	403'9	697'9	1156'5	3012'6	1'41	5 a.m.	
Total in the five years						- -	53265'9		
Mean hourly value						-	$\frac{53265'9}{24}$	=	2219'4 = 1'00

When we examine the values presented in this table, we at once perceive that the occurrence of the larger disturbances of the Vertical Force at Toronto is governed by periodical laws depending on the hours of solar time. The aggregate value of the disturbances in the five years is a maximum at 3 p.m. and a minimum at 11 a.m.; there is also a secondary maximum at 5 p.m. and a secondary minimum at 9 p.m. There is, therefore, a double progression, and between the successive maxima and minima the progression is everywhere continuous. During the hours of the day, *i.e.* from 8 a.m. to 11 p.m., the ratios are less than unity, except from 4 to 7 p.m. inclusive, when the secondary maximum takes place. From midnight to 7 a.m. the ratios at every hour exceed unity.

Tables XXII. and XXIII. exhibit the aggregate values at the different hours, separated into disturbances increasing the force and disturbances decreasing the force, and the ratios of the values at each hour of both kinds of disturbance to their respective mean hourly values.

VERTICAL FORCE: DISTURBANCES.

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TABLE XXIII.  
Disturbances increasing the Force.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	H.	
18	63'3	14'8	48'7	17'9	113'1	237'8	0'28	6 a.m.
19	74'9	4'7	47'4	21'0	148'2	296'2	0'32	7 a.m.
20	72'2	27'5	78'8	31'3	177'9	387'7	0'42	8 a.m.
21	62'6	8'9	29'5	22'6	139'9	263'5	0'29	9 a.m.
22	65'8	14'3	80'4	31'5	178'1	373'1	0'40	10 a.m.
23	67'6	29'9	52'3	77'1	262'2	489'1	0'52	11 a.m.
0	86'6	39'8	127'8	149'9	396'7	800'8	0'86	Noon.
1	162'0	80'2	141'3	265'5	495'7	1144'7	1'23	1 p.m.
2	163'6	144'6	194'5	303'6	684'9	1491'2	1'61	2 p.m.
3	203'6	151'9	275'9	469'7	691'4	1792'5	1'98	3 p.m.
4	249'5	185'7	387'6	451'8	870'6	2145'2	2'31	4 p.m.
5	290'1	260'4	350'9	450'2	811'1	2192'7	2'36	5 p.m.
6	278'0	215'7	324'8	518'6	733'5	2070'6	2'23	6 p.m.
7	333'7	221'9	251'3	471'2	857'2	2135'3	2'30	7 p.m.
8	236'4	208'4	200'2	370'2	766'2	1781'4	1'92	8 p.m.
9	146'3	122'7	238'5	223'7	521'1	1230'3	1'35	9 p.m.
10	127'3	87'5	107'7	131'5	397'1	851'1	0'92	10 p.m.
11	110'9	72'8	68'1	80'8	219'2	551'8	0'59	11 p.m.
12	87'3	55'3	74'5	42'0	216'7	475'8	0'51	Midnight.
13	64'5	31'6	45'8	45'0	139'3	326'2	0'35	1 a.m.
14	60'7	24'6	62'1	47'3	130'1	324'8	0'35	2 a.m.
15	60'3	22'7	63'7	42'1	111'1	303'9	0'33	3 a.m.
16	34'5	21'6	50'4	58'2	91'4	256'1	0'28	4 a.m.
17	72'5	13'7	51'9	47'2	115'6	300'9	0'32	5 a.m.
Total in the five years						- - 22262'7		
Mean hourly value						- $\frac{22263}{24}$ =	927'6 = 1'00	

TABLE XXIV.

*Disturbances decreasing the Force.*

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.	
	1844.	1845.	1846.	1847.	1848.				
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	H.		
18	335°0	348°7	258°1	615°1	891°9	2439°7	1°90	6 a.m.	
19	290°8	237°2	197°9	542°7	1001°6	2270°2	1°76	7 a.m.	
20	201°5	161°1	193°7	424°1	420°5	1390°9	1°07	8 a.m.	
21	145°2	100°4	100°2	238°8	343°5	928°1	0°72	9 a.m.	
22	117°8	43°0	31°3	97°0	151°3	440°4	0°34	10 a.m.	
23	45°2	35°4	49°7	42°9	93°6	266°8	0°20	11 a.m.	
0	58°5	18°4	60°3	41°4	57°9	236°5	0°19	Noon.	
1	51°1	26°4	78°1	40°	59°4	255°4	0°19	1 p.m.	
2	57°5	14°4	66°1	39°3	35°9	213°2	0°16	2 p.m.	
3	34°3	8°7	41°3	42°4	24°9	151°6	0°11	3 p.m.	
4	40°9	15°0	51°4	59°1	13°8	180°2	0°14	4 p.m.	
5	52°3	—	46°6	72°0	23°5	194°4	0°15	5 p.m.	
6	51°0	13°1	44°3	37°9	23°7	170°0	0°13	6 p.m.	
7	55°9	22°7	50°7	46°3	28°1	203°7	0°15	7 p.m.	
8	38°3	14°8	56°4	63°6	23°0	196°1	0°15	8 p.m.	
9	57°9	74°0	55°0	137°9	81°3	406°1	0°31	9 p.m.	
10	118°1	93°5	176°2	514°4	142°5	1044°7	0°80	10 p.m.	
11	166°8	155°1	246°8	504°2	441°0	1513°9	1°17	11 p.m.	
12	313°7	428°8	393°0	742°0	740°9	2618°4	2°02	Midnight.	
13	302°0	437°9	440°4	987°1	1022°6	3190°0	2°47	1 a.m.	
14	312°6	495°8	475°4	911°2	1041°3	3239°3	2°50	2 a.m.	
15	369°7	543°5	523°4	952°6	1162°0	3542°2	2°74	3 a.m.	
16	260°3	436°8	504°7	876°7	1008°2	3086°7	2°39	4 a.m.	
17	366°9	415°2	352°0	650°7	1040°9	2825°7	2°19	5 a.m.	
Total in the five years						-	31003°2		
Mean hourly value						-	$\frac{31003^{\circ}2}{24}$	=	1291°8 = 1°00

When we examine the ratios presented in these tables, it is at once seen that both the disturbances which increase the force and those which decrease it are regulated by periodical laws. In the disturbances increasing the force, the values are highest from noon to 10 P.M. inclusive; they exceed the mean hourly value from 1 to 9 P.M., and exceed twice that value from 4 to 7 P.M. The hours of maximum and minimum are approximately, the maximum about 5 P.M., and the minimum about 5 A.M., though (in the latter case particularly) the precise hour is not very distinctly marked. In the disturbances decreasing the force, the values are least from 10 A.M. to 9 P.M. inclusive; they are less than the mean hourly value from 9 A.M. to 10 P.M. inclusive, and greater from 11 P.M. to 8 A.M. inclusive: from midnight to 5 A.M. the values exceed at each hour twice the mean hourly value. The maximum is well marked at 3 A.M.; the minimum less distinctly marked takes place during the hours of the afternoon. When the ratios are highest in the disturbances increasing the force they are *generally* lowest in those decreasing the force, and *vice versa*; but the periodical laws in the two cases are not strictly the converse of each other.

The account given in pp. viii to x of the operations by which the successive steps were accomplished in the investigation of which the disturbances of the Horizontal Force were the subject, applies equally to the present investigation into the periodical laws of the disturbances of the Vertical Force; and in Table XXV. will be found the successive normal values which have been employed of the Vertical Force at the standard temperature of 55° at the different hours, corresponding to Table X in the case of the Horizontal Force.

TABLE ANV.

Hourly Means of the Readings of the Vertical Force Magnetometer, reduced to an uniform Temperature or exceeded 4.0 Scale Divisions or .00026 parts

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.													
	0	1	2	3	4	5	6	7	8	9	10	11		
	TORONTO HOURS.													
	18	19	20	21	22	23	0	1	2	3	4	5		
1842 :	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
Oct. 1 to 31 -	67.6	68.1	67.5	66.7	66.7	66.8	67.7	68.2	69.0	69.8	69.9	70.0	69.9	70.0
Nov. 1 to 18 -	64.6	64.9	65.1	64.5	63.9	64.0	64.4	65.6	66.6	66.0	66.5	66.9	66.6	66.9
Nov. 19 to 30 -	57.8	57.0	57.7	58.0	58.1	58.4	58.9	59.5	59.6	59.9	60.5	61.1	61.7	61.1
Dec. 1 to 31 -	57.6	57.4	57.7	57.1	56.3	56.5	57.0	57.4	58.6	58.5	58.5	58.6	58.1	58.6
1843 :														
Jan. 1 to 31 -	57.9	57.5	56.9	57.0	56.6	56.5	57.5	58.0	58.0	58.1	58.1	58.3	58.9	58.3
Feb. 1 to 8 -	53.1	53.3	54.0	51.7	51.3	51.9	52.4	53.1	53.9	54.3	54.6	54.6	55.0	54.6
July 2 to 29 -	58.8	58.9	58.9	58.8	58.8	58.7	59.2	59.9	60.8	61.8	62.7	63.6	63.6	63.6
July and August	57.3	56.8	56.7	56.7	56.7	57.0	57.5	58.2	59.1	60.0	60.7	61.0	60.9	61.0
Aug. 1 to 31 -	55.8	54.8	54.6	54.7	54.7	55.4	55.8	56.6	57.5	58.2	58.8	58.5	58.2	58.5
Sept. 1 to 9 -	51.2	50.7	50.7	50.7	50.8	51.0	51.5	52.3	53.0	53.7	54.0	53.8	53.7	53.8
Sept. 10 to 30 -	46.7	46.6	46.9	46.8	46.9	46.7	47.3	48.1	48.4	49.3	49.2	49.2	49.2	49.2
1844 :														
Feb. 9 to 29 -	105.4	105.6	106.2	104.9	104.0	104.3	104.8	105.0	105.7	105.7	105.6	105.5	105.6	105.6
March 1 to 23 -	107.8	107.6	107.8	107.3	106.0	105.2	105.8	106.2	106.9	108.0	108.1	108.5	108.3	108.5
Mar. 24 to April 6 -	105.0	104.8	105.1	104.8	103.8	103.3	103.7	104.3	105.1	105.6	105.7	106.3	106.0	106.3
April 7 to 23 -	102.2	102.0	102.5	102.4	101.7	101.3	102.1	102.5	103.4	103.2	103.2	103.9	103.5	103.9
April 24 to May 11 -	100.1	100.3	100.4	99.9	99.2	98.7	99.4	99.6	100.1	100.9	101.5	102.0	101.6	102.0
May 12 to 25 -	98.3	98.6	98.3	97.4	96.7	96.3	96.9	96.7	97.8	98.7	99.8	100.1	99.8	100.1
May 26 to June 8 -	95.5	95.5	95.2	94.6	94.3	94.1	94.6	94.5	95.2	96.1	97.0	97.3	97.0	97.3
June 9 to 22 -	92.8	92.5	92.2	91.9	91.9	92.0	92.4	92.2	92.9	93.6	94.3	94.5	94.1	94.5
June 23 to 30 -	90.6	90.0	89.6	89.2	90.0	90.3	90.2	90.7	92.2	91.7	92.6	92.9	91.9	92.9
July 1 to 6 -	90.8	91.4	91.0	90.0	88.9	88.4	88.6	89.5	90.8	91.8	92.2	93.6	92.6	93.6
July 7 to 13 -	88.7	89.1	89.0	88.8	87.9	87.9	88.1	88.5	88.9	90.1	91.2	91.1	91.3	91.1
July 14 to 20 -	86.5	86.5	86.6	86.4	85.7	84.5	84.4	85.0	85.6	87.0	88.9	88.8	88.4	88.8
July 21 to 31 -	84.4	84.1	83.4	83.0	82.8	82.9	83.2	83.0	83.6	85.1	85.4	86.5	86.4	86.5
Aug. 1 to 31 -	82.0	82.4	82.4	81.8	81.8	82.0	81.5	82.8	84.3	85.1	85.2	85.1	85.1	85.1
Sept. 1 to 30 -	80.6	80.6	79.6	79.1	79.4	80.0	80.6	81.9	82.3	82.8	82.3	82.9	81.7	82.9
Oct. 1 to 31 -	81.0	81.2	80.9	80.4	79.9	79.9	80.7	81.7	82.0	82.7	82.6	82.4	82.3	82.4
Nov. 1 to 30 -	79.9	80.6	81.0	79.6	79.8	80.4	80.6	81.4	81.9	82.4	82.8	82.7	82.2	82.7
Dec. 1 to 31 -	78.1	77.8	77.8	77.8	77.6	77.5	78.5	79.3	79.7	80.0	80.2	80.0	80.0	80.0
1845 :														
Jan. 1 to 15 -	78.2	77.8	78.2	77.8	77.8	78.2	78.2	77.6	78.5	78.9	78.5	78.6	78.7	78.6
Jan. 16 to 31 -	75.1	75.1	74.7	74.6	74.1	74.5	75.1	75.9	77.4	77.9	77.5	77.5	77.5	77.5
Feb. 1 to 28 -	70.9	70.7	71.0	70.8	70.5	70.0	70.8	71.6	72.8	73.1	72.9	73.3	73.1	73.3
March 1 to 31 -	70.4	70.6	70.4	69.5	68.6	68.0	68.6	69.2	70.1	70.9	71.1	71.5	71.6	71.5
April 1 to 30 -	69.9	69.8	68.9	68.7	68.2	68.1	68.5	69.2	70.1	70.8	70.9	71.2	71.1	71.2
May 1 to 31 -	67.8	67.3	66.2	65.5	64.5	64.2	65.0	66.2	67.3	68.2	68.6	69.0	68.6	69.0
June 1 to 21 -	108.7	109.0	108.5	107.5	106.8	107.1	107.0	107.0	108.2	109.4	110.3	110.5	110.5	110.5
June 22 to 30 -	105.5	105.8	104.2	102.7	101.9	102.2	103.1	103.4	104.9	106.2	107.5	107.2	106.9	107.2
July 1 to 12 -	103.3	102.9	102.3	102.1	101.5	101.7	101.5	102.0	102.5	104.1	106.0	105.7	106.3	105.7
July 13 to 31 -	98.8	98.3	97.8	97.5	96.6	95.9	95.5	96.7	97.4	98.1	98.7	99.3	99.2	99.3
Aug. 1 to 16 -	167.2	166.8	166.6	165.8	165.4	165.6	165.4	166.0	167.5	167.8	167.9	168.3	168.4	168.3
Aug. 17 to 31 -	163.8	162.7	162.7	161.8	161.4	162.2	162.6	163.7	164.7	164.6	165.0	165.6	164.9	165.6

of 53° Fall of the whole

VERTICAL FORCE: TABLE OF NORMALS.

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TABLE XXV.

Temperature  
in 100026 parts

of 55° Fahrenheit, and omitting disturbed Observations in which the Amount of Disturbance equalled  
of the whole Vertical Force at Toronto.

		GOTTINGEN HOURS.											Periods from which the Hourly Means are derived.	
10	11	12	13	14	15	16	17	18	19	20	21	22		23
TORONTO HOURS.														
4	5	6	7	8	9	10	11	12	13	14	15	16	17	
69'9	70'0	69'9	69'6	69'6	69'6	69'6	69'6	69'6	69'6	69'6	69'6	69'6	69'6	1842 :
66'5	66'9	66'6	66'7	66'3	66'3	66'4	66'4	66'4	66'4	66'4	66'4	66'4	66'4	Oct. 1 to 31.
60'5	61'1	61'1	60'8	60'5	61'0	59'7	58'9	60'6	60'9	59'3	59'1	58'9	58'9	Nov. 1 to 18.
58'5	58'6	58'1	58'0	58'3	57'9	57'7	57'5	57'3	57'2	57'2	56'8	57'5	57'5	Nov. 19 to 30.
														Dec. 1 to 31.
58'1	58'3	58'9	59'1	58'8	59'0	58'9	58'6	57'5	57'5	57'5	57'2	57'1	57'3	1843 :
54'6	54'6	55'0	54'8	54'8	54'8	54'4	53'9	53'2	52'8	53'0	53'0	53'2	53'6	Jan. 1 to 31.
62'7	63'6	63'6	62'4	61'6	61'3	60'5	59'7	59'4	59'2	57'9	58'0	58'4	58'4	Feb. 1 to 28.
60'7	61'0	60'9	60'1	59'6	59'2	58'4	57'7	57'4	57'1	56'2	56'1	56'2	56'8	July 2 to 29.
58'8	58'5	58'2	57'8	57'6	57'1	56'4	55'7	55'4	55'1	54'4	54'2	54'1	55'2	July and August.
51'0	53'8	53'7	53'5	53'3	52'8	52'1	51'7	51'1	50'7	49'9	50'3	50'0	50'8	Aug. 1 to 31.
49'2	49'2	49'2	49'2	49'1	48'5	47'9	47'7	46'9	46'3	45'4	46'5	46'0	46'5	Sept. 10 to 30.
														Sept. 10 to 30.
105'6	105'5	105'6	106'0	106'2	105'7	105'7	105'8	106'0	105'6	105'3	105'3	105'6	105'6	1844 :
108'1	108'5	108'3	108'0	107'8	108'0	107'7	107'0	107'0	106'5	106'8	106'5	107'1	106'9	Feb. 9 to 29.
105'7	106'3	106'0	105'9	105'4	105'1	104'4	104'2	104'5	104'5	104'5	104'2	104'2	104'4	March 1 to 23.
103'2	103'9	103'5	102'8	102'7	102'0	101'1	101'3	102'1	102'3	102'2	101'9	101'4	102'0	March and April.
101'5	102'0	101'6	101'4	101'1	100'7	99'8	99'6	99'8	99'8	99'5	99'7	99'4	100'0	April 7 to 23.
99'8	100'1	99'8	100'1	99'6	99'5	98'6	98'0	97'7	97'2	96'7	97'5	97'5	98'1	April and May.
97'0	97'3	97'0	97'1	96'7	96'7	96'0	95'5	95'2	94'7	94'5	94'8	95'0	95'5	May 12 to 25.
91'3	94'5	94'1	94'1	93'9	93'9	93'3	93'0	92'8	92'2	92'2	92'1	92'4	93'0	May and June.
92'6	92'9	91'9	91'5	91'6	91'5	91'0	90'8	91'3	90'6	90'3	89'9	89'8	90'6	June 9 to 22.
92'2	93'6	92'6	92'1	91'7	91'7	91'1	91'0	90'7	90'2	90'0	90'1	90'6	91'2	June 23 to 30.
91'2	91'1	91'3	90'8	90'6	90'4	89'9	89'5	89'6	89'1	89'0	89'6	89'0	88'0	July 1 to 6.
88'9	88'8	88'4	87'7	87'8	87'0	86'6	86'4	84'9	86'3	86'6	86'7	86'3	86'4	July 7 to 13.
85'4	86'5	86'4	86'0	84'8	84'4	84'0	84'0	83'7	83'3	81'2	81'4	84'3	84'4	July 14 to 20.
85'2	85'1	85'1	84'3	83'9	83'4	82'8	82'2	82'1	81'5	80'7	81'1	82'2	82'4	July 21 to 31.
82'3	82'9	81'7	81'4	81'6	81'7	81'6	80'7	80'1	80'9	80'7	80'1	80'0	80'2	Aug. 1 to 31.
82'6	82'4	82'3	82'8	82'3	81'8	81'4	81'1	81'2	80'3	80'7	81'2	80'8	80'4	Sept. 1 to 30.
82'8	82'7	82'2	82'3	82'3	82'2	82'5	81'4	81'1	80'7	80'2	80'1	80'1	80'3	Oct. 1 to 31.
80'2	80'0	80'0	79'8	79'7	79'8	79'6	79'0	78'9	78'7	78'7	78'6	78'2	78'3	Nov. 1 to 30.
														Dec. 1 to 31.
78'5	78'6	78'7	78'4	78'4	78'6	78'4	77'9	78'1	77'8	77'7	77'4	78'8	76'8	1845 :
77'5	77'5	77'5	77'7	77'4	76'7	75'6	75'9	75'7	75'7	75'6	75'1	75'1	75'1	Jan. 1 to 15.
72'9	73'3	73'1	72'9	72'8	72'6	72'4	72'5	71'3	71'6	71'4	71'6	71'0	71'3	Jan. 16 to 31.
71'4	71'5	71'4	71'5	71'4	71'3	71'0	71'2	70'5	70'3	69'9	70'5	70'7	70'5	Feb. 1 to 28.
70'9	71'2	71'1	70'8	71'0	70'7	70'0	70'0	69'5	69'2	68'8	69'1	69'3	70'0	March 1 to 31.
68'6	69'0	68'8	68'3	67'8	67'2	67'4	66'7	66'5	66'6	66'8	66'8	66'7	67'2	April 1 to 30.
110'3	110'5	110'5	109'8	109'7	109'2	109'5	109'2	108'6	108'9	109'0	109'5	109'4	109'8	May 1 to 31.
107'5	107'2	106'9	106'9	106'1	106'4	105'8	105'6	105'9	105'5	105'1	105'1	105'6	106'4	June 11 to 21.
106'0	105'7	106'3	105'7	105'2	105'1	104'2	103'9	103'5	103'6	103'7	104'1	103'7	103'9	June 22 to 30.
98'7	99'3	99'2	98'4	97'6	97'5	97'7	97'3	97'0	96'4	95'7	96'3	96'6	98'0	July 1 to 12.
167'9	168'3	168'4	167'4	167'3	166'3	166'5	165'3	165'3	164'4	165'4	165'9	165'4	165'9	July 13 to 31.
165'0	165'6	164'9	164'2	164'4	163'5	163'3	163'1	162'7	162'5	162'1	162'3	162'6	163'3	Aug. 1 to 16.
														Aug. 17 to 31.

(Continued on p. xl)



ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

TABLE XXV.—continued.

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.											
	0	1	2	3	4	5	6	7	8	9	10	11
	TORONTO HOURS.											
	18	19	20	21	22	23	0	1	2	3	4	5
1845 (cont.):												
Sept. 1 to 13	161°0	160°8	161°2	160°2	160°9	161°4	162°2	163°5	165°4	165°4	165°1	164°9
Sept. 14 to 30	164°1	163°5	163°0	162°1	162°0	162°6	163°1	161°2	165°1	161°9	165°3	165°2
Oct. 1 to 18	162°9	163°0	163°0	161°6	161°5	161°7	162°1	162°6	163°4	161°0	163°9	164°2
Oct. 19 to 31	158°8	159°1	159°5	159°9	158°9	158°3	158°3	159°5	160°6	160°8	160°0	160°6
Nov. 1 to 15	159°6	159°8	159°2	158°5	158°4	158°6	159°4	160°2	161°4	161°2	160°7	160°4
Nov. 16 to 30	158°1	158°1	157°5	157°1	156°6	157°3	158°7	159°0	159°7	159°0	158°8	158°9
Dec. 1 to 31	155°5	155°2	155°2	155°4	155°5	155°6	155°7	156°1	157°1	157°6	157°5	157°1
1846:												
Jan. 1 to 31	154°9	151°9	155°2	151°4	151°3	151°4	151°7	155°9	156°5	156°7	156°4	156°1
Feb. 1 to 24	155°0	155°1	155°1	154°1	153°3	153°4	151°4	151°4	155°1	155°6	155°8	155°8
March 1 to 24	151°5	154°5	154°6	153°8	152°7	152°2	152°7	153°6	151°4	155°5	155°4	155°5
April 3 to 25	213°7	213°5	213°2	212°2	211°2	211°2	211°2	211°8	213°2	214°0	213°6	213°4
April 26 to May 9	212°3	211°9	211°6	210°6	210°0	211°9	211°0	212°0	213°4	213°5	213°5	213°9
May 10 to 23	210°9	210°3	210°1	209°1	208°7	210°6	210°9	212°3	213°6	213°0	213°5	214°0
May 24 to June 6	209°3	208°6	208°7	208°4	207°9	209°1	209°5	210°1	211°5	212°0	212°7	212°5
June 7 to 21	207°8	206°9	207°3	207°8	207°1	207°6	208°0	208°5	209°4	211°0	211°9	210°9
June 22 to July 4	206°7	206°0	206°0	206°1	205°7	206°0	206°4	206°6	207°8	209°0	210°3	210°6
July 5 to 25	205°6	205°1	201°6	201°3	201°3	201°3	201°7	201°8	206°1	207°1	208°8	209°8
July 26 to Aug. 8	204°4	201°4	203°8	201°3	202°8	203°1	203°5	201°1	205°2	206°2	207°6	208°6
Aug. 9 to 22	203°3	203°6	202°9	202°4	201°4	201°9	202°4	203°4	201°4	205°3	206°4	207°1
Aug. 23 to 31	201°8	201°8	201°4	200°5	200°0	201°1	201°3	202°3	202°8	203°9	204°5	201°8
Sept. 1 to 30	200°4	200°0	199°9	198°6	198°6	200°4	200°2	201°2	202°5	202°3	202°7	202°6
Oct. 1 to Nov. 1	200°3	200°2	200°3	200°2	199°6	199°7	200°0	201°0	201°9	202°1	202°1	202°0
Nov. 2 to 7	198°3	198°4	198°5	198°3	197°9	19°8	198°3	190°1	200°0	200°1	199°8	199°8
Nov. 8 to 28	196°3	196°6	196°6	196°4	196°2	196°2	196°6	197°2	198°0	198°0	197°5	197°6
Nov. 29 to Dec. 12	193°3	193°6	193°5	193°0	192°6	193°5	193°5	191°2	195°0	194°8	195°0	195°3
Dec. 13 to 16	190°4	190°6	190°2	189°9	189°4	189°5	190°3	190°7	191°1	191°1	191°0	191°2
Dec. 17 to 31	187°6	187°0	187°7	187°1	186°8	186°8	187°5	187°7	188°0	188°0	187°3	188°2
1847:												
Jan. 1 to 15	185°7	186°0	185°5	181°7	184°5	185°3	186°4	186°2	186°5	186°8	186°7	186°8
Jan. 16 to 31	183°1	183°1	183°0	182°9	183°2	182°5	183°1	183°2	183°3	183°3	182°7	183°8
Feb. 1 to 28	182°0	182°9	183°4	181°8	181°6	181°6	182°2	182°7	183°1	183°0	183°1	183°2
March 1 to 31	182°7	183°6	184°2	183°3	182°5	182°2	183°1	183°2	184°0	181°4	181°6	181°8
April 1 to 30	183°5	183°3	182°8	182°1	181°3	181°1	181°5	182°1	183°1	181°2	181°7	181°9
May 1 to 31	181°0	180°4	179°8	179°1	178°3	178°3	178°2	179°0	179°7	180°8	181°6	182°3
June 1 to 15	178°4	176°8	176°5	176°5	176°8	177°1	177°4	177°8	178°2	180°0	179°5	180°0
June 16 to 30	175°4	175°2	171°6	174°4	174°1	173°2	173°2	173°6	174°2	175°6	177°0	177°1
July 1 to 31	173°3	173°3	173°0	172°5	171°7	171°7	171°6	172°0	172°5	173°9	174°2	174°8
Aug. 1 to 31	171°8	171°0	170°3	169°8	170°9	170°9	170°9	171°1	171°5	171°9	172°6	173°1
Sept. 1 to 30	172°7	172°8	172°5	171°3	170°7	171°5	171°9	173°0	173°0	173°3	173°6	171°1
Oct. 1 to 31	172°9	173°7	173°7	173°2	173°0	172°2	172°8	174°2	174°4	174°7	171°9	174°6
Nov. 1 to 30	172°6	173°3	172°3	172°2	171°9	172°6	173°4	174°1	175°4	175°3	175°5	175°2
Dec. 1 to 31	171°1	170°8	170°7	170°9	170°6	171°0	171°0	171°9	172°4	173°1	172°2	172°0
1848:												
Jan. 1 to 31	167°2	167°6	167°6	166°9	166°8	167°1	168°6	168°9	169°1	169°4	169°8	169°5
Feb. 1 to 29	164°8	165°4	166°5	165°0	163°2	163°5	161°7	165°3	165°8	166°3	165°7	166°1
March 1 to 31	163°5	164°8	164°2	162°9	162°1	162°2	163°3	161°0	161°3	161°3	165°0	165°0
April 1 to 30	161°2	161°0	163°7	162°7	162°1	161°5	162°1	162°2	161°0	161°5	165°1	161°0
May 1 to 31	160°0	160°0	160°0	159°6	158°5	157°4	158°1	159°1	160°4	161°0	161°6	161°5
June 1 to 30	156°1	155°9	154°9	153°9	151°0	153°6	153°8	153°6	154°9	156°2	156°2	157°7

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161°5

160°6

158°8

157°1

156°1

156°1

155°5

213°1

213°6

212°1

210°6

209°9

209°2

206°3

201°2

202°2

202°0

199°9

197°7

191°9

191°1

188°2

187°0

185°2

187°0

183°3

181°8

181°2

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VERTICAL FORCE: TABLE OF NORMALS.

TABLE XXV.—continued.

		GÖTTINGEN HOURS.												Periods from which the Hourly Means are derived.
10	11	12	13	14	15	16	17	18	19	20	21	22	23	
TORONTO HOURS.														
4	5	6	7	8	9	10	11	12	13	14	15	16	17	
165 <sup>1</sup>	164 <sup>9</sup>	161 <sup>9</sup>	161 <sup>5</sup>	161 <sup>8</sup>	163 <sup>4</sup>	163 <sup>4</sup>	162 <sup>8</sup>	162 <sup>1</sup>	160 <sup>9</sup>	160 <sup>2</sup>	160 <sup>9</sup>	160 <sup>2</sup>	161 <sup>3</sup>	1845: Sept. 1 to 13.
165 <sup>3</sup>	165 <sup>2</sup>	161 <sup>5</sup>	161 <sup>3</sup>	161 <sup>7</sup>	161 <sup>5</sup>	161 <sup>4</sup>	162 <sup>7</sup>	162 <sup>9</sup>	163 <sup>2</sup>	163 <sup>0</sup>	161 <sup>7</sup>	162 <sup>0</sup>	162 <sup>9</sup>	Sept. 14 to 30.
163 <sup>9</sup>	164 <sup>2</sup>	161 <sup>0</sup>	161 <sup>2</sup>	161 <sup>1</sup>	161 <sup>0</sup>	161 <sup>2</sup>	163 <sup>4</sup>	162 <sup>9</sup>	162 <sup>3</sup>	162 <sup>4</sup>	162 <sup>4</sup>	162 <sup>3</sup>	162 <sup>5</sup>	Oct. 1 to 18.
160 <sup>0</sup>	160 <sup>6</sup>	160 <sup>6</sup>	160 <sup>5</sup>	161 <sup>0</sup>	162 <sup>3</sup>	161 <sup>3</sup>	161 <sup>2</sup>	160 <sup>6</sup>	160 <sup>0</sup>	159 <sup>5</sup>	159 <sup>7</sup>	159 <sup>4</sup>	159 <sup>6</sup>	Oct. 19 to 31.
160 <sup>7</sup>	160 <sup>4</sup>	160 <sup>6</sup>	159 <sup>8</sup>	159 <sup>9</sup>	159 <sup>9</sup>	159 <sup>4</sup>	159 <sup>0</sup>	159 <sup>0</sup>	159 <sup>3</sup>	158 <sup>9</sup>	159 <sup>2</sup>	159 <sup>1</sup>	159 <sup>4</sup>	Nov. 1 to 15.
158 <sup>8</sup>	158 <sup>9</sup>	158 <sup>8</sup>	158 <sup>6</sup>	157 <sup>8</sup>	158 <sup>9</sup>	157 <sup>4</sup>	158 <sup>1</sup>	157 <sup>5</sup>	156 <sup>9</sup>	156 <sup>8</sup>	157 <sup>6</sup>	157 <sup>6</sup>	157 <sup>5</sup>	Nov. 16 to 30.
157 <sup>5</sup>	157 <sup>1</sup>	157 <sup>1</sup>	157 <sup>5</sup>	157 <sup>3</sup>	157 <sup>0</sup>	157 <sup>2</sup>	157 <sup>2</sup>	156 <sup>4</sup>	155 <sup>8</sup>	155 <sup>9</sup>	155 <sup>8</sup>	155 <sup>3</sup>	155 <sup>4</sup>	Dec. 1 to 31.
156 <sup>4</sup>	156 <sup>4</sup>	156 <sup>1</sup>	156 <sup>5</sup>	156 <sup>6</sup>	156 <sup>2</sup>	156 <sup>4</sup>	156 <sup>0</sup>	155 <sup>7</sup>	154 <sup>8</sup>	155 <sup>2</sup>	154 <sup>6</sup>	151 <sup>9</sup>	154 <sup>7</sup>	1846: Jan. 1 to 31.
155 <sup>8</sup>	155 <sup>8</sup>	156 <sup>1</sup>	156 <sup>4</sup>	155 <sup>9</sup>	155 <sup>8</sup>	156 <sup>1</sup>	155 <sup>7</sup>	155 <sup>4</sup>	154 <sup>9</sup>	154 <sup>8</sup>	151 <sup>7</sup>	151 <sup>3</sup>	151 <sup>5</sup>	Feb. 1 to 28.
155 <sup>4</sup>	155 <sup>5</sup>	155 <sup>5</sup>	155 <sup>5</sup>	154 <sup>8</sup>	151 <sup>7</sup>	151 <sup>8</sup>	155 <sup>4</sup>	151 <sup>6</sup>	151 <sup>2</sup>	151 <sup>1</sup>	151 <sup>1</sup>	154 <sup>0</sup>	153 <sup>8</sup>	March 1 to 31.
213 <sup>6</sup>	213 <sup>4</sup>	213 <sup>1</sup>	215 <sup>1</sup>	214 <sup>9</sup>	213 <sup>5</sup>	213 <sup>1</sup>	213 <sup>3</sup>	212 <sup>0</sup>	212 <sup>3</sup>	212 <sup>7</sup>	212 <sup>6</sup>	213 <sup>2</sup>	213 <sup>3</sup>	April 1 to 30.
213 <sup>5</sup>	213 <sup>9</sup>	213 <sup>6</sup>	213 <sup>8</sup>	213 <sup>4</sup>	212 <sup>3</sup>	212 <sup>1</sup>	211 <sup>6</sup>	210 <sup>9</sup>	210 <sup>7</sup>	210 <sup>9</sup>	210 <sup>7</sup>	212 <sup>0</sup>	211 <sup>7</sup>	April 1 to May 31.
212 <sup>7</sup>	212 <sup>5</sup>	211 <sup>2</sup>	212 <sup>2</sup>	211 <sup>9</sup>	211 <sup>1</sup>	211 <sup>4</sup>	209 <sup>9</sup>	209 <sup>8</sup>	209 <sup>1</sup>	206 <sup>2</sup>	208 <sup>8</sup>	210 <sup>7</sup>	210 <sup>9</sup>	May 1 to 31.
211 <sup>9</sup>	210 <sup>9</sup>	212 <sup>1</sup>	211 <sup>4</sup>	210 <sup>7</sup>	210 <sup>2</sup>	209 <sup>7</sup>	208 <sup>0</sup>	208 <sup>5</sup>	208 <sup>3</sup>	208 <sup>0</sup>	206 <sup>9</sup>	208 <sup>6</sup>	208 <sup>7</sup>	May 1 to June 31.
210 <sup>3</sup>	210 <sup>6</sup>	210 <sup>6</sup>	210 <sup>6</sup>	209 <sup>5</sup>	208 <sup>0</sup>	208 <sup>1</sup>	207 <sup>3</sup>	207 <sup>5</sup>	206 <sup>7</sup>	205 <sup>0</sup>	206 <sup>5</sup>	206 <sup>5</sup>	207 <sup>5</sup>	June 1 to 30.
208 <sup>8</sup>	208 <sup>8</sup>	209 <sup>9</sup>	210 <sup>1</sup>	208 <sup>5</sup>	206 <sup>9</sup>	206 <sup>6</sup>	206 <sup>7</sup>	206 <sup>0</sup>	205 <sup>2</sup>	203 <sup>5</sup>	203 <sup>6</sup>	203 <sup>6</sup>	205 <sup>1</sup>	June 1 to July 31.
207 <sup>6</sup>	208 <sup>6</sup>	209 <sup>2</sup>	209 <sup>6</sup>	207 <sup>5</sup>	206 <sup>6</sup>	205 <sup>2</sup>	205 <sup>1</sup>	204 <sup>8</sup>	202 <sup>8</sup>	200 <sup>3</sup>	200 <sup>2</sup>	200 <sup>9</sup>	202 <sup>8</sup>	July 1 to 31.
206 <sup>4</sup>	207 <sup>1</sup>	207 <sup>7</sup>	207 <sup>6</sup>	206 <sup>4</sup>	204 <sup>7</sup>	204 <sup>4</sup>	203 <sup>9</sup>	203 <sup>8</sup>	202 <sup>5</sup>	201 <sup>0</sup>	200 <sup>8</sup>	200 <sup>5</sup>	202 <sup>1</sup>	July 10 to Aug. 31.
204 <sup>5</sup>	204 <sup>8</sup>	206 <sup>3</sup>	206 <sup>0</sup>	205 <sup>3</sup>	202 <sup>8</sup>	203 <sup>7</sup>	202 <sup>5</sup>	202 <sup>8</sup>	202 <sup>3</sup>	201 <sup>7</sup>	201 <sup>5</sup>	201 <sup>2</sup>	201 <sup>5</sup>	Aug. 1 to 31.
202 <sup>7</sup>	202 <sup>6</sup>	201 <sup>2</sup>	201 <sup>4</sup>	203 <sup>5</sup>	202 <sup>0</sup>	202 <sup>5</sup>	201 <sup>5</sup>	201 <sup>5</sup>	201 <sup>5</sup>	201 <sup>4</sup>	201 <sup>1</sup>	200 <sup>6</sup>	200 <sup>1</sup>	Aug. 1 to Sept. 30.
202 <sup>1</sup>	202 <sup>0</sup>	202 <sup>2</sup>	202 <sup>3</sup>	201 <sup>8</sup>	201 <sup>2</sup>	201 <sup>4</sup>	200 <sup>4</sup>	200 <sup>2</sup>	200 <sup>7</sup>	201 <sup>1</sup>	200 <sup>7</sup>	200 <sup>0</sup>	199 <sup>8</sup>	Sept. 1 to 30.
199 <sup>8</sup>	199 <sup>8</sup>	202 <sup>0</sup>	202 <sup>1</sup>	201 <sup>8</sup>	201 <sup>0</sup>	201 <sup>1</sup>	200 <sup>0</sup>	199 <sup>6</sup>	200 <sup>0</sup>	199 <sup>9</sup>	199 <sup>9</sup>	199 <sup>1</sup>	199 <sup>0</sup>	Oct. 1 to 31.
197 <sup>5</sup>	197 <sup>6</sup>	199 <sup>9</sup>	20 <sup>1</sup>	200 <sup>1</sup>	199 <sup>5</sup>	199 <sup>6</sup>	199 <sup>0</sup>	198 <sup>4</sup>	198 <sup>2</sup>	198 <sup>5</sup>	198 <sup>4</sup>	197 <sup>9</sup>	197 <sup>8</sup>	Oct. 1 to Nov. 31.
195 <sup>0</sup>	195 <sup>3</sup>	197 <sup>7</sup>	198 <sup>2</sup>	198 <sup>5</sup>	197 <sup>9</sup>	198 <sup>1</sup>	197 <sup>9</sup>	196 <sup>7</sup>	196 <sup>8</sup>	197 <sup>1</sup>	196 <sup>9</sup>	196 <sup>7</sup>	196 <sup>6</sup>	Nov. 1 to 30.
191 <sup>0</sup>	191 <sup>2</sup>	191 <sup>9</sup>	191 <sup>7</sup>	191 <sup>8</sup>	195 <sup>3</sup>	195 <sup>0</sup>	191 <sup>4</sup>	193 <sup>8</sup>	193 <sup>4</sup>	192 <sup>7</sup>	192 <sup>3</sup>	192 <sup>8</sup>	193 <sup>1</sup>	Nov. 20 to Dec. 12.
187 <sup>3</sup>	188 <sup>2</sup>	191 <sup>1</sup>	191 <sup>2</sup>	191 <sup>1</sup>	191 <sup>5</sup>	190 <sup>9</sup>	190 <sup>7</sup>	190 <sup>0</sup>	189 <sup>6</sup>	190 <sup>0</sup>	189 <sup>8</sup>	189 <sup>4</sup>	189 <sup>6</sup>	Dec. 1 to 31.
		188 <sup>2</sup>	188 <sup>7</sup>	188 <sup>5</sup>	188 <sup>4</sup>	187 <sup>8</sup>	187 <sup>7</sup>	187 <sup>6</sup>	187 <sup>6</sup>	187 <sup>2</sup>	187 <sup>7</sup>	187 <sup>1</sup>	187 <sup>4</sup>	Dec. 17 to 31.
186 <sup>7</sup>	186 <sup>8</sup>	187 <sup>0</sup>	186 <sup>7</sup>	186 <sup>7</sup>	186 <sup>2</sup>	185 <sup>7</sup>	185 <sup>9</sup>	185 <sup>5</sup>	185 <sup>3</sup>	185 <sup>3</sup>	185 <sup>7</sup>	185 <sup>5</sup>	185 <sup>2</sup>	1847: Jan. 1 to 15.
182 <sup>7</sup>	183 <sup>8</sup>	184 <sup>2</sup>	183 <sup>8</sup>	181 <sup>0</sup>	184 <sup>5</sup>	183 <sup>7</sup>	183 <sup>6</sup>	183 <sup>7</sup>	183 <sup>4</sup>	183 <sup>3</sup>	183 <sup>3</sup>	182 <sup>9</sup>	182 <sup>9</sup>	Jan. 16 to 31.
181 <sup>6</sup>	181 <sup>8</sup>	183 <sup>3</sup>	183 <sup>3</sup>	183 <sup>3</sup>	183 <sup>0</sup>	182 <sup>8</sup>	182 <sup>7</sup>	182 <sup>6</sup>	182 <sup>6</sup>	182 <sup>1</sup>	182 <sup>2</sup>	182 <sup>2</sup>	181 <sup>7</sup>	Feb. 1 to 28.
181 <sup>7</sup>	181 <sup>9</sup>	181 <sup>2</sup>	183 <sup>9</sup>	181 <sup>6</sup>	184 <sup>5</sup>	181 <sup>4</sup>	183 <sup>9</sup>	183 <sup>5</sup>	183 <sup>3</sup>	182 <sup>6</sup>	183 <sup>4</sup>	183 <sup>7</sup>	183 <sup>2</sup>	March 1 to 31.
181 <sup>6</sup>	182 <sup>3</sup>	184 <sup>3</sup>	181 <sup>5</sup>	184 <sup>2</sup>	183 <sup>6</sup>	183 <sup>6</sup>	183 <sup>3</sup>	182 <sup>4</sup>	182 <sup>4</sup>	182 <sup>1</sup>	182 <sup>9</sup>	182 <sup>7</sup>	183 <sup>1</sup>	April 1 to 30.
179 <sup>5</sup>	180 <sup>0</sup>	182 <sup>3</sup>	182 <sup>2</sup>	182 <sup>1</sup>	181 <sup>8</sup>	181 <sup>5</sup>	180 <sup>8</sup>	180 <sup>4</sup>	180 <sup>3</sup>	180 <sup>2</sup>	180 <sup>1</sup>	179 <sup>8</sup>	180 <sup>9</sup>	May 1 to 31.
177 <sup>0</sup>	177 <sup>1</sup>	179 <sup>6</sup>	179 <sup>1</sup>	179 <sup>4</sup>	178 <sup>7</sup>	178 <sup>1</sup>	176 <sup>8</sup>	176 <sup>1</sup>	177 <sup>2</sup>	177 <sup>2</sup>	177 <sup>2</sup>	177 <sup>8</sup>	178 <sup>2</sup>	June 1 to 15.
174 <sup>2</sup>	174 <sup>8</sup>	177 <sup>3</sup>	176 <sup>8</sup>	176 <sup>1</sup>	175 <sup>5</sup>	174 <sup>7</sup>	174 <sup>5</sup>	173 <sup>8</sup>	174 <sup>4</sup>	174 <sup>2</sup>	174 <sup>4</sup>	175 <sup>8</sup>	175 <sup>4</sup>	June 16 to 30.
172 <sup>6</sup>	173 <sup>1</sup>	174 <sup>7</sup>	174 <sup>2</sup>	173 <sup>3</sup>	173 <sup>6</sup>	172 <sup>7</sup>	172 <sup>5</sup>	172 <sup>6</sup>	171 <sup>7</sup>	171 <sup>6</sup>	171 <sup>5</sup>	172 <sup>1</sup>	172 <sup>6</sup>	July 1 to 31.
173 <sup>6</sup>	174 <sup>1</sup>	172 <sup>1</sup>	172 <sup>0</sup>	172 <sup>0</sup>	171 <sup>2</sup>	171 <sup>1</sup>	169 <sup>6</sup>	170 <sup>5</sup>	170 <sup>0</sup>	170 <sup>3</sup>	169 <sup>7</sup>	170 <sup>2</sup>	169 <sup>7</sup>	Aug. 1 to 31.
171 <sup>9</sup>	174 <sup>6</sup>	174 <sup>0</sup>	172 <sup>2</sup>	172 <sup>5</sup>	172 <sup>6</sup>	172 <sup>4</sup>	172 <sup>0</sup>	170 <sup>8</sup>	170 <sup>5</sup>	171 <sup>0</sup>	171 <sup>6</sup>	170 <sup>6</sup>	171 <sup>6</sup>	Sept. 1 to 30.
175 <sup>5</sup>	175 <sup>2</sup>	175 <sup>1</sup>	175 <sup>3</sup>	175 <sup>2</sup>	175 <sup>0</sup>	175 <sup>1</sup>	174 <sup>7</sup>	173 <sup>6</sup>	173 <sup>1</sup>	173 <sup>1</sup>	173 <sup>5</sup>	173 <sup>1</sup>	172 <sup>9</sup>	Oct. 1 to 31.
172 <sup>2</sup>	172 <sup>0</sup>	174 <sup>8</sup>	175 <sup>2</sup>	175 <sup>1</sup>	174 <sup>9</sup>	174 <sup>3</sup>	174 <sup>4</sup>	173 <sup>9</sup>	172 <sup>9</sup>	172 <sup>7</sup>	172 <sup>6</sup>	172 <sup>6</sup>	172 <sup>4</sup>	Nov. 1 to 30.
		171 <sup>8</sup>	172 <sup>4</sup>	172 <sup>5</sup>	172 <sup>5</sup>	172 <sup>4</sup>	171 <sup>8</sup>	170 <sup>4</sup>	171 <sup>2</sup>	170 <sup>8</sup>	171 <sup>4</sup>	170 <sup>6</sup>	170 <sup>0</sup>	Dec. 1 to 31.
169 <sup>8</sup>	169 <sup>5</sup>	169 <sup>6</sup>	169 <sup>7</sup>	169 <sup>6</sup>	169 <sup>3</sup>	168 <sup>7</sup>	168 <sup>7</sup>	168 <sup>1</sup>	168 <sup>0</sup>	167 <sup>2</sup>	167 <sup>3</sup>	167 <sup>2</sup>	167 <sup>3</sup>	1848: Jan. 1 to 31.
165 <sup>7</sup>	166 <sup>1</sup>	165 <sup>6</sup>	165 <sup>6</sup>	165 <sup>8</sup>	166 <sup>2</sup>	166 <sup>1</sup>	166 <sup>0</sup>	165 <sup>8</sup>	165 <sup>1</sup>	165 <sup>2</sup>	165 <sup>0</sup>	165 <sup>1</sup>	165 <sup>1</sup>	Feb. 1 to 29.
165 <sup>0</sup>	165 <sup>0</sup>	165 <sup>4</sup>	165 <sup>7</sup>	165 <sup>5</sup>	165 <sup>2</sup>	165 <sup>1</sup>	165 <sup>1</sup>	164 <sup>4</sup>	163 <sup>7</sup>	163 <sup>6</sup>	163 <sup>7</sup>	164 <sup>1</sup>	163 <sup>8</sup>	March 1 to 31.
161 <sup>6</sup>	161 <sup>5</sup>	161 <sup>3</sup>	161 <sup>9</sup>	163 <sup>9</sup>	163 <sup>7</sup>	163 <sup>6</sup>	162 <sup>5</sup>	161 <sup>7</sup>	162 <sup>0</sup>	162 <sup>3</sup>	162 <sup>6</sup>	162 <sup>4</sup>	163 <sup>3</sup>	April 1 to 30.
156 <sup>2</sup>	157 <sup>7</sup>	162 <sup>1</sup>	161 <sup>0</sup>	160 <sup>5</sup>	160 <sup>3</sup>	160 <sup>3</sup>	159 <sup>7</sup>	158 <sup>6</sup>	158 <sup>4</sup>	159 <sup>2</sup>	159 <sup>9</sup>	159 <sup>8</sup>	160 <sup>1</sup>	May 1 to 31.
		156 <sup>9</sup>	158 <sup>1</sup>	157 <sup>2</sup>	156 <sup>4</sup>	156 <sup>0</sup>	155 <sup>6</sup>	154 <sup>9</sup>	154 <sup>8</sup>	154 <sup>9</sup>	155 <sup>1</sup>	156 <sup>5</sup>	156 <sup>6</sup>	June 1 to 30.

## INCLINATION AND TOTAL FORCE.

*Analysis of the larger Disturbances.*—The disturbances of the Inclination which equalled or exceeded  $1' \cdot 0$ , and of the total force which equalled or exceeded  $\cdot 0004$  of the whole force, both measured from the respective normals at the same hour and in the same month, were obtained from the observed disturbances of the Horizontal and Vertical Forces in the following manner: Tables were formed, in the first column of which were placed in chronological order the larger disturbances of the Vertical Force, separated as already described, and in the second column those of the Horizontal Force, each expressed in terms of the respective forces, by the conversion of the scale divisions in which the disturbances were observed into parts of the respective forces by means of the scale coefficient.

At a large proportion of the hours of contemporaneous observation, when one of the two components of the force exhibited a disturbance which by its amount was brought into the category of the larger disturbances, the other component was also disturbed. In such cases there were contemporaneous entries in both columns; but when one of the components only was so affected, the entry in the corresponding column of the other component was blank. These blanks were all filled up by inserting for the component which did not exhibit a disturbance of sufficiently large amount to have been classed as a large disturbance and separated accordingly, the difference, whatever that might be, between the observation at that hour and its proper normal. These two columns then exhibited all the larger disturbances of both the horizontal and vertical components whenever either component was disturbed, with the contemporaneous difference of the other component from its mean or normal value in the cases when one only of the two components exhibited a large disturbance. The entries in the two columns had each their proper signs prefixed, + if the disturbance or difference from the normal were in augmentation of the force, and - if in diminution of the force. These two columns then expressed the values of  $\frac{\Delta Y}{Y}$  for the Vertical Force, and  $\frac{\Delta X}{X}$  for the Horizontal Force, for every hour at which either  $\frac{\Delta Y}{Y}$  equalled or exceeded  $\cdot 00026$  parts of the Vertical Force, or  $\frac{\Delta X}{X}$  equalled or exceeded  $\cdot 0012$  parts of the Horizontal Force. A third and fourth column were then filled in, the third expressing the values of  $\Delta\theta$ , or the disturbances of the Inclination, and the fourth the values of  $\frac{\Delta\phi}{\phi}$ , or the disturbances of the Total Force (in parts of  $\phi$ , the total force at Toronto), corresponding to the entries in the first and second columns, and computed by the formulæ—

$$\Delta\theta = \sin \psi \cos \psi \left( \frac{\Delta Y}{Y} - \frac{\Delta X}{X} \right);$$

$$\frac{\Delta\phi}{\phi} = \cos \psi \frac{\Delta X}{X} + \sin \psi \frac{\Delta Y}{Y}$$

From the third and fourth columns all the disturbances of the Inclination ( $\Delta\theta$ ) which equalled or exceeded 1'0 in amount, and all the disturbances of the total force ( $\frac{\Delta\phi}{\phi}$ ) equalling or exceeding .0004 in amount, were taken, as forming respectively a sufficient body of the larger disturbances of each element to permit their periodical laws to be investigated and shown. These disturbances were then dealt with, in regard to classification and tabular arrangement, in the same manner that has been already explained in treating of the disturbances of the horizontal and vertical components of the force.

In deriving the disturbances of the Inclination and Total Force from those of the Horizontal and Vertical Forces, all the calculations and arrangement in tables have been prepared, under the superintendence of Mr. Magrath, by the Non-Commissioned Officers of the Royal Artillery employed in the Woolwich Office; every part of the process having had the advantage of two independent computers.

*Inclination.*—The aggregate values of the disturbed observations of the Inclination in the different years, each ending June 30th, are as follows:—

TABLE XXVI.

Year ending June 30th 1844*	-	-	-	-	694'3
" " 1845	-	-	-	-	613'9
" " 1846	-	-	-	-	753'7
" " 1847	-	-	-	-	1399'0
" " 1848	-	-	-	-	3139'8
Total in the five years	-	-	-	-	<u>6590'7</u>

$$\text{Mean annual value } \frac{6590'7}{5} = 1318'1.$$

The ratios in each year to the mean annual value are as follows:—

TABLE XXVII.

Year ending June 30th 1844	-	-	-	-	0'52
" " 1845	-	-	-	-	0'47
" " 1846	-	-	-	-	0'57
" " 1847	-	-	-	-	1'06
" " 1848	-	-	-	-	2'40

Table XXVIII. exhibits the aggregate values in the different years divided into disturbances increasing the Inclination and disturbances decreasing the Inclination.

\* Having five months of the preceding year (October 1842 to February 1843) substituted for five of its own months (see page xi).

TABLE XXVIII.

		Increasing.	Decreasing
Year ending June 30th 1844	- -	498'8	185'5
" " 1845	- -	510'5	103'1
" " 1846	- -	612'7	111'0
" " 1847	- -	1165'8	233'2
" " 1848	- -	2809'8	330'1
Total in the five years	- -	5397'5	993'2

The effect of the larger disturbances is, therefore, to increase the Inclination considerably more than to decrease it. The ratios of the values of the disturbances increasing the Inclination to those which decrease it, on the average of the five years is 5·6 to 1. In the several years the ratios are as follows:—

TABLE XXIX.

Year ending June 30th 1844:	As 2'7 to 1.
" " 1845:	As 5'0 to 1.
" " 1846:	As 4'3 to 1.
" " 1847:	As 5'0 to 1.
" " 1848:	As 8'5 to 1.

The augmentation of the ratio in the year ending June 30th, 1848, was occasioned by the excessive amount of disturbance in December 1847, which in the case of the Inclination was chiefly in disturbances increasing its value.

Table XXX. exhibits the aggregate values of the disturbances, distributed into the different *months* of their occurrence, and the ratios which the values in the different months bear to the mean monthly value or average of all the months.

TABLE XXX.

Months.	In the Year ending June 30th.					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July	69'7	16'1	38'4	95'2	89'5	308'9	0'56	July.
August	53'5	62'5	45'4	100'5	143'4	405'3	0'74	August.
September	30'0	73'8	84'0	200'5	531'3	918'6	1'67	September.
October	59'5	73'4	50'4	182'6	429'7	795'6	1'45	October.
November	138'7	86'7	25'2	54'4	254'4	558'4	1'02	November.
December	53'6	61'4	73'9	32'6	527'8	749'3	1'37	December.
January	33'8	72'5	11'4	16'1	161'3	355'1	0'64	January.
February	24'9	38'3	32'1	78'2	310'8	514'3	0'91	February.
March	98'1	35'5	63'9	149'4	184'6	531'5	0'97	March.
April	83'8	49'8	111'2	236'6	288'2	772'6	1'41	April.
May	30'5	33'1	99'9	162'1	140'9	466'5	0'85	May.
June	8'2	10'8	85'9	60'8	48'9	214'6	0'39	June.
Total in the five years						6590'7		
Mean monthly values						$\frac{6590'7}{12} = 549'2$	$= 1'00$	

December is the only exception to a periodical variation, having its maxima at the epochs of the equinoxes, and its minima at those of the solstices. This apparent anomaly was occasioned by the excessive and unusual disturbances in December 1847. The ratio for the month of December taken from a comparison of the disturbances in that month in the first four years, with the mean monthly value in the same years, is 0.77.

Table XXXI. exhibits the aggregate values of the disturbances of the Inclination distributed into the different *hours* of their occurrence, together with the ratios of the values at each hour to the mean hourly value or average of all the hours.

TABLE XXXI.

Toronto Astronomical Time.	In the Year ending June 30th,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
Hours.								
18	19.4	12.4	13.0	40.1	139.0	233.9	0.81	6 a.m.
19	16.5	16.6	17.7	47.0	221.8	322.6	1.17	7 a.m.
20	10.0	15.0	17.2	38.9	211.2	292.3	1.07	8 a.m.
21	20.6	20.1	35.9	51.6	160.4	288.9	1.00	9 a.m.
22	36.8	31.1	31.4	60.4	122.1	281.5	1.00	10 a.m.
23	36.5	29.7	31.9	51.0	130.5	253.6	1.00	11 a.m.
0	38.8	35.5	31.8	55.3	125.0	189.4	1.00	Noon.
1	31.1	25.2	41.8	42.8	127.8	271.0	0.99	1 p.m.
2	33.5	23.1	23.7	48.8	147.5	230.6	0.79	2 p.m.
3	21.9	26.4	32.9	48.1	95.6	225.2	0.82	3 p.m.
4	35.7	18.8	30.0	40.0	77.5	202.0	0.73	4 p.m.
5	40.5	32.2	30.5	56.7	77.7	237.6	0.86	5 p.m.
6	43.2	28.0	41.9	61.0	93.8	270.9	0.99	6 p.m.
7	45.1	40.6	33.9	66.8	121.4	307.8	1.12	7 p.m.
8	37.0	40.1	41.5	66.2	91.8	282.6	1.03	8 p.m.
9	42.1	34.6	50.9	88.8	82.1	298.8	1.09	9 p.m.
10	36.5	35.4	48.9	83.0	113.9	317.7	1.16	10 p.m.
11	31.9	21.6	45.1	74.0	147.3	313.9	1.11	11 p.m.
12	19.7	33.3	42.2	52.6	146.3	291.1	1.07	Midnight.
13	20.9	28.4	27.9	100.0	160.7	337.9	1.23	1 a.m.
14	22.1	15.0	22.4	70.1	189.5	323.4	1.18	2 a.m.
15	13.8	15.7	20.8	79.2	133.4	262.9	0.96	3 a.m.
16	9.1	11.3	19.2	41.5	146.1	230.5	0.81	4 a.m.
17	18.0	13.8	12.2	31.5	121.1	202.6	0.71	5 a.m.
Total in the five years						6590.7		
Mean hourly value						$\frac{6590.7}{24} =$	271.6 = 1.00	

The hourly disturbances of the Inclination arrange themselves in four groups, exhibiting a double progression. From 7 a.m. to noon, and again from 7 p.m. to 2 a.m. inclusive, the values equal or exceed the mean hourly value; and from 1 p.m.

to 6 P.M. inclusive, and again from 3 A.M. to 6 A.M. inclusive, they fall short of the mean hourly value.

Table XXXII. shows, in columns 2 and 3, the values at the different hours separated into disturbances which increase the Inclination and disturbances which decrease it.

The disturbances which increase the Inclination have two epochs of maxima, and two of minima; the principal maximum is at 1 A.M., and the secondary maximum at 7 A.M.; the principal minimum at 4 P.M., and the secondary at 5 A.M. The progression from the afternoon minimum to the maximum twelve hours later, may be regarded as continuous, with slight and possibly accidental interruptions at 8 P.M. and midnight; from the maximum at 1 A.M. to the minimum at 5 A.M., and thence to the secondary maximum at 7 A.M., the progressions are continuous and uninterrupted; and from the maximum at 7 A.M. to the afternoon minimum it is also continuous, with slight and possibly accidental interruptions at noon and 3 P.M.

The disturbances which decrease the Inclination are comparatively small at all the hours: they exhibit, however, a systematic tendency to be greater during the hours of the day than during those of the night; their actual maximum is at 2 P.M., and their minimum at 2 A.M.

The disturbances which increase the Inclination preponderate greatly at all the hours. In the Declination, there are certain hours in which the easterly deflections preponderate, and others in which the westerly deflections preponderate; and in the total force there are certain hours in which the general effect of the disturbances is to increase the force, and other hours in which their general effect is to decrease it. The Inclination differs in this respect from either of the other two magnetic elements; inasmuch as its disturbances have a uniform character in increasing the Inclination at all the hours. The greater or less degree in which this effect is produced is shown in column 4, which contains the *differences* between the two preceding columns (or their sums when the signs prefixed are regarded). This column therefore exhibits at the different hours the accumulated *effect* in five years of the disturbances of 1'0, and upwards. The least amount of disturbance occurs at 2, 3, and 4 in the afternoon; at 6 P.M. it becomes considerable, and continues so till 3 A.M. inclusive, showing a decided maximum at 1 and 2 A.M. There is a second increase in the amount of disturbance at 7, 8, and 9 A.M., with a secondary maximum at 7 A.M., not much inferior in amount to the principal maximum at 2 A.M. In column 5 is shown the average *daily* effect of the disturbances of 1'0 and upwards, at the different hours of the 24; this is obtained by dividing the accumulated effect at the different hours in five years by 1550, being the number of days in the five years on which the observations were made.

INCLINATION : DISTURBANCES.

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TABLE XXXII.

Toronto Astronomical Time.	Aggregate Values of the Disturbances		Excess of the Increasing Disturbances in Five Years.	Mean Diurnal Effect of the larger Disturbances.	Toronto Civil Time.
	Increasing the Inclination.	Decreasing the Inclination.			
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)
H.					
18	+ 189'7	-34'2	+ 155'5	+ 0'10	6 a.m.
19	+ 301'7	-20'9	+ 280'8	+ 0'18	7 a.m.
20	+ 266'8	-25'5	+ 241'3	+ 0'16	8 a.m.
21	+ 245'1	-42'5	+ 201'6	+ 0'13	9 a.m.
22	+ 224'4	-60'4	+ 164'0	+ 0'10	10 a.m.
23	+ 205'8	-73'8	+ 132'0	+ 0'09	11 a.m.
0	+ 216'6	-72'8	+ 143'8	+ 0'09	Noon.
1	+ 201'4	-69'6	+ 131'8	+ 0'09	1 p.m.
2	+ 150'8	-79'8	+ 71'0	+ 0'05	2 p.m.
3	+ 168'2	-57'0	+ 111'2	+ 0'07	3 p.m.
4	+ 142'2	-59'8	+ 82'4	+ 0'05	4 p.m.
5	+ 183'1	-54'5	+ 128'4	+ 0'08	5 p.m.
6	+ 241'3	-29'6	+ 211'7	+ 0'14	6 p.m.
7	+ 265'8	-42'0	+ 223'8	+ 0'14	7 p.m.
8	+ 260'2	-22'4	+ 237'8	+ 0'16	8 p.m.
9	+ 275'1	-23'7	+ 251'4	+ 0'16	9 p.m.
10	+ 275'2	-42'5	+ 232'7	+ 0'15	10 p.m.
11	+ 279'3	-34'6	+ 244'7	+ 0'16	11 p.m.
12	+ 256'6	-37'5	+ 219'1	+ 0'14	Midnight.
13	+ 309'4	-28'5	+ 280'9	+ 0'18	1 a.m.
14	+ 308'2	-15'2	+ 293'0	+ 0'19	2 a.m.
15	+ 243'3	-19'6	+ 223'7	+ 0'14	3 a.m.
16	+ 209'4	-21'1	+ 188'3	+ 0'12	4 a.m.
17	+ 177'9	-24'7	+ 153'2	+ 0'10	5 a.m.

*Total Force.*—The aggregate values of the disturbed observations of the Total Force in the different years, each ending June 30th, are as follows :—

TABLE XXXIII.

Year ending June 30th 1844*	-	-	4491 parts of the total force.
" " 1845	-	-	2775 " "
" " 1846	-	-	3809 " "
" " 1847	-	-	7293 " "
" " 1848	-	-	1'0747 " "
Total in the five years	-	-	2'9115
Mean annual value	-	$\frac{2'9115}{5}$	= '5823 = 1'00

\* Having five months of the preceding year (October 1842 to February 1843) substituted for five of its own months (*see* page xxix).



The ratios in each year to the mean annual value are as follows :—

TABLE XXXIV.

Year ending June 30th, 1844*	-	-	-	0.77
" " 1845	-	-	-	0.48
" " 1846	-	-	-	0.65
" " 1847	-	-	-	1.25
" " 1848	-	-	-	1.81

Table XXXV. exhibits the aggregate values in the different years divided into Disturbances increasing the force, and Disturbances decreasing the force.

TABLE XXXV.

Year ending June 30th, 1841	-	-	Increasing.	Decreasing.		
			'2011	'2480	parts of the Total Force.	
" " 1845	-	-	'0616	'2159	"	"
" " 1846	-	-	'1363	'2416	"	"
" " 1847	-	-	'1839	'5451	"	"
" " 1848	-	-	'4067	'6680	"	"
Total in the five years	-	-	'9896	1'9219		

The general effect of the larger disturbances of the Total Force is to decrease the total magnetic force more than to increase it.

The ratio of the values of the disturbances decreasing the Total Force to those which increase it, on the average of the five years, is 1.94 to 1. The ratios in the several years are as follows :—

TABLE XXXVI.

Year ending June 30th, 1844	-	-	-	-	as 1.23 to 1
" " 1845	-	-	-	-	as 3.51 to 1
" " 1846	-	-	-	-	as 1.79 to 1
" " 1847	-	-	-	-	as 2.96 to 1
" " 1848	-	-	-	-	as 1.64 to 1

\* Including five months (October to February) substituted from the preceding year (see page xxix).

Table XXXVII. exhibits the aggregate values of the disturbances distributed into the different *months* of their occurrence; with the ratios which the values in the different months bear to the mean monthly value or average of all the months.

TABLE XXXVII.

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - -	'0447	'0151	'0294	'0668	'0338	'1898	0'78	July.
August - -	'0244	'0349	'0437	'1161	'0384	'2575	1'06	August.
September - -	'0157	'0587	'0292	'1339	'1302	'3977	1'61	September.
October - -	'0115	'0524	'0205	'0688	'1161	'3296	1'36	October.
November - -	'0515	'0317	'0257	'0170	'0604	'1863	0'77	November.
December - -	'0677	'0033	'0265	'0047	'1538	'2560	1'05	December.
January - -	'0296	'0260	'0128	'0120	'0176	'1250	0'52	January.
February - -	'0026	'0144	'0132	'0256	'1237	'1795	0'74	February.
March - -	'0605	'0136	'0169	'0625	'1012	'2547	1'05	March.
April - -	'0633	'0071	'0551	'1332	'1163	'3753	1'55	April.
May - -	'0164	'0144	'0675	'0711	'0929	'2623	1'08	May.
June - -	'0012	'0056	'0104	'0176	'0300	'0918	0'39	June.
Total in the five years - - -						2'9115	parts of the Total Force.	
Mean monthly value						$\frac{2'9115}{12} = '2426$	$= 1'00$	

The anomaly in the month of December, which is the only exception to a periodical variation having its maxima at the epochs of the equinoxes and its minima at those of the solstices, was occasioned by the excessive and unusual disturbances in December 1847. If the ratio for December be taken from the value of the disturbances in that month in the four years ending respectively June 30th, 1844, 1845, 1846, and 1847, compared with the mean monthly value in the same years, it is found to be 0'66, which would place it in its natural order in the progression. We may, therefore, regard the general progression of the annual variation of the Total Force depending on the larger disturbances to be from a maximum at each of the equinoxes to a minimum at each of the solstices, and *vice versa*; and the month of December 1847 as forming an accidental exception, presenting a decided anomaly in that particular year, but which might possibly disappear if the month were comprehended in observations continued through a longer series of years than are here combined.

Tables XXXVIII. and XXXIX. exhibit the aggregate monthly values in the different years separated into disturbances increasing and disturbances decreasing the force.

TABLE XXXVIII.

*Disturbances increasing the Total Force.*

Months.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - - -	'0154	'0004	'0062	'0115	'0152	'0187	0.59	July.
August - - -	'0078	'0107	'0087	'0174	'0091	'0537	0.65	August.
September - - -	'0258	'0014	'0016	'0329	'0554	'1201	1.45	September.
October - - -	'0215	'0084	'0105	'0142	'0367	'0943	1.10	October.
November - - -	'0201	'0080	—	'0039	'0114	'0734	0.89	November.
December - - -	'0580	—	'0176	'0011	'0581	'1378	1.67	December.
January - - -	'0106	'0188	'0024	'0095	'0184	'0594	0.72	January.
February - - -	'0016	'0009	'0025	'0100	'0426	'0576	0.70	February.
March - - -	'0175	'0046	'0068	'0262	'0443	'0964	1.17	March.
April - - -	'0186	'0025	'0316	'0350	'0370	'4247	1.51	April.
May - - -	'0042	'0020	'0367	'0100	'0363	'0892	1.08	May.
June - - -	—	'0009	'0117	'0092	'0155	'0373	0.45	June.
Total in the five years - - -						'9896	parts of the Total Force.	
Mean monthly value						$\frac{9896}{12} = '0825$	= 1.00	

TABLE XXXIX.

*Disturbances decreasing the Total Force.*

Months.	In the Years ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July - - -	'0293	'0147	'0232	'0553	'0186	'1411	0.88	July.
August - - -	'0166	'0242	'0350	'0987	'0263	'2038	1.27	August.
September - - -	'0199	'0543	'0276	'1010	'0748	'2776	1.73	September.
October - - -	'0200	'0140	'0100	'0546	'1097	'2383	1.49	October.
November - - -	'0314	'0237	'0257	'0131	'0190	'1129	0.70	November.
December - - -	'0097	'0033	'0089	'0006	'0057	'1182	0.74	December.
January - - -	'0190	'0072	'0104	'0025	'0295	'0686	0.43	January.
February - - -	'0010	'0135	'0107	'0156	'0844	'4219	0.76	February.
March - - -	'0430	'0090	'0101	'0363	'0599	'1583	0.99	March.
April - - -	'0447	'0049	'0235	'0982	'0793	'2506	1.56	April.
May - - -	'0122	'0124	'0308	'0614	'0566	'1731	1.08	May.
June - - -	'0012	'0047	'0287	'0084	'0445	'0575	0.36	June.
Total in the five years - - -						'9219	parts of the Total Force.	
Mean monthly value						$\frac{9219}{12} = '0602$	= 1.00	

## TOTAL FORCE : DISTURBANCES.

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Both the disturbances which increase the Total Force and those which decrease it show the same periodical law of monthly variation which has been pointed out in the remarks on Table XXXVII., in which they were exhibited conjointly. In both, the equinoxes are epochs of maxima and the solstices of minima. In the disturbances decreasing the force, the progression from the minima to the maxima and from the maxima to the minima is continuous and uninterrupted. In those increasing the force, December is the only interruption, and ceases to be so if the ratio be taken from the four years ending June 30th, 1844, 1845, 1846, and 1847; omitting the year ending June 30th, 1848. The excessive disturbances in December 1847 are seen by Tables XXXVIII. and XXXIX. to have been chiefly disturbances increasing the Total Force.

Table XL. exhibits the aggregate values of the disturbances distributed into the different *hours* of their occurrence; together with the ratios of the values at the different hours to the mean hourly value or average of all the hours.

TABLE XL.

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
16.								11.
18	'0257	'0185	'0136	'0109	'0655	'1612	1'35	6 a.m.
19	'0267	'0127	'0105	'0371	'0759	'1629	1'34	7 a.m.
20	'0190	'0064	'0123	'0281	'0381	'1039	0'86	8 a.m.
21	'0139	'0045	'0060	'0157	'0268	'0669	0'55	9 a.m.
22	'0089	'0015	'0033	'0050	'0123	'0320	0'26	10 a.m.
23	'0058	'0013	'0024	'0012	'0107	'0214	0'17	11 a.m.
0	'0066	'0005	'0054	'0046	'0130	'0301	0'25	Noon.
1	'0135	'0024	'0076	'0120	'0228	'0583	0'48	1 p.m.
2	'0123	'0039	'0108	'0169	'0337	'0776	0'64	2 p.m.
3	'0143	'0010	'0111	'0252	'0353	'0929	0'76	3 p.m.
4	'0171	'0063	'0225	'0229	'0474	'1162	0'96	4 p.m.
5	'0224	'0117	'0191	'0277	'0434	'1243	1'02	5 p.m.
6	'0181	'0082	'0148	'0251	'0357	'1019	0'84	6 p.m.
7	'0235	'0072	'0134	'0205	'0458	'1104	0'91	7 p.m.
8	'0165	'0063	'0080	'0176	'0395	'0879	0'72	8 p.m.
9	'0120	'0075	'0104	'0164	'0285	'0748	0'62	9 p.m.
10	'0141	'0078	'0144	'0361	'0268	'0995	0'82	10 p.m.
11	'0191	'0094	'0158	'0359	'0370	'1172	0'97	11 p.m.
12	'0261	'0270	'0272	'0188	'0610	'1901	1'57	Midnight.
13	'0241	'0254	'0267	'0661	'0743	'2169	1'78	1 a.m.
14	'0257	'0292	'0300	'0634	'0767	'2250	1'85	2 a.m.
15	'0292	'0309	'0339	'0625	'0821	'2386	1'97	3 a.m.
16	'0207	'0245	'0321	'0578	'0708	'2059	1'70	4 a.m.
17	'0325	'0230	'0240	'0415	'0716	'1926	1'59	5 a.m.
Total in the five years						2'9115	parts of the Total Force.	
Mean hourly value						$\frac{2'9115}{24} = '1213$	$= 1'00$	

The law which regulates the occurrence in the *diurnal* period of the disturbances of larger amount of the Total Force is here in its principal features sufficiently distinct and obvious. From 8 A.M. to 11 P.M. inclusive the disturbance at every hour is less than at any hour from midnight to 7 A.M. inclusive. It is a minimum at 11 A.M., and a maximum at 3 A.M., the disturbance at the hour of maximum being about eleven times greater than at the minimum hour. From the maximum at 3 A.M. to the minimum at 11 A.M. the progression is continuous and uninterrupted: from the minimum at 11 A.M. to the maximum at 3 A.M. the progression is interrupted in the afternoon by secondary small maxima at 5 and 7 P.M., with corresponding secondary minima at 6 P.M. and 9 P.M., but from the secondary minimum at 9 P.M. to the principal maximum at 3 A.M. the progression is continuous and uninterrupted.

Tables XLI. and XLII. show the aggregate hourly values in the different years, separated into disturbances increasing and disturbances decreasing the force; with the ratio of the values at each hour to the respective mean hourly values.

TABLE XLI.  
*Disturbances increasing the Force.*

Toronto Astronomical Time,	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
h.								h.
18	*0015	*0004	*0022	—	*0042	*0113	0'27	6 a.m.
19	*0060	—	*0012	*0004	*0029	*0105	0'25	7 a.m.
20	*0058	*0009	*0026	*0011	*0043	*0117	0'36	8 a.m.
21	*0055	—	*0004	*0004	*0025	*0088	0'21	9 a.m.
22	*0038	—	*0009	*0001	*0049	*0100	0'21	10 a.m.
23	*0040	*0005	*0016	*0008	*0088	*0157	0'38	11 a.m.
0	*0056	*0005	*0010	*0046	*0122	*0269	0'65	Noon.
1	*0100	*0024	*0014	*0146	*0216	*0500	1'21	1 p.m.
2	*0105	*0039	*0085	*0161	*0325	*0745	1'73	2 p.m.
3	*0122	*0040	*0137	*0231	*0353	*0883	2'14	3 p.m.
4	*0149	*0062	*0211	*0210	*0171	*1107	2'69	4 p.m.
5	*0196	*0117	*0177	*0260	*0434	*1184	2'87	5 p.m.
6	*0150	*0078	*0126	*0217	*0357	*0658	2'32	6 p.m.
7	*0192	*0068	*0119	*0192	*0154	*1025	2'49	7 p.m.
8	*0139	*0055	*0061	*0152	*0386	*0796	1'93	8 p.m.
9	*0079	*0037	*0080	*0039	*0228	*0493	1'19	9 p.m.
10	*0062	*0028	*0041	*0036	*0159	*0326	0'79	10 p.m.
11	*0069	*0022	*0028	*0018	*0074	*0211	0'51	11 p.m.
12	*0061	*0012	*0035	*0001	*0080	*0192	0'46	Midnight.
13	*0054	*0010	*0015	*0001	*0030	*0143	0'27	1 a.m.
14	*0046	—	*0012	*0046	*0025	*0099	0'24	2 a.m.
15	*0048	—	*0020	*0021	*0033	*0122	0'30	3 a.m.
16	*0023	—	*0016	*0021	*0013	*0073	0'18	4 a.m.
17	*0051	—	*0021	*0001	*0028	*0120	0'29	5 a.m.
Total in the five years							*9896 parts of the force.	
Mean hourly value						*9896 24	=	*0112 = 1'00

TOTAL FORCE: DISTURBANCES.

TABLE XLII.

*Disturbances decreasing the Force.*

Toronto Astronomical Time.	In the Year ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
11.								11.
18	*0212	*0181	*0144	*0109	*0613	*1529	1*91	6 a.m.
19	*0207	*0127	*0093	*0367	*0730	*1524	1*90	7 a.m.
20	*0132	*0055	*0097	*0270	*0338	*0892	1*11	8 a.m.
21	*0084	*0045	*0056	*0153	*0243	*0581	0*73	9 a.m.
22	*0061	*0045	*0024	*0046	*0074	*0220	0*27	10 a.m.
23	*0018	*0008	*0008	*0004	*0019	*0057	0*07	11 a.m.
0	*0010	—	*0014	—	*0008	*0032	0*04	Noon.
1	*0035	—	*0032	*0004	*0012	*0083	0*10	1 p.m.
2	*0018	—	*0023	*0008	*0012	*0061	0*08	2 p.m.
3	*0021	—	*0001	*0021	—	*0046	0*06	3 p.m.
4	*0022	—	*0014	*0019	—	*0055	0*07	4 p.m.
5	*0028	—	*0014	*0017	—	*0059	0*07	5 p.m.
6	*0031	—	*0026	*0004	—	*0061	0*08	6 p.m.
7	*0013	—	*0019	*0013	*0004	*0079	0*10	7 p.m.
8	*0026	*0004	*0020	*0021	*0009	*0083	0*10	8 p.m.
9	*0041	*0033	*0029	*0095	*0057	*0255	0*32	9 p.m.
10	*0079	*0046	*0107	*0328	*0109	*0669	0*84	10 p.m.
11	*0122	*0067	*0135	*0341	*0296	*0961	1*20	11 p.m.
12	*0200	*0258	*0237	*0184	*0530	*1709	2*13	Midnight.
13	*0190	*0244	*0252	*0657	*0713	*2056	2*57	1 a.m.
14	*0211	*0292	*0288	*0618	*0742	*2451	2*60	2 a.m.
15	*0244	*0309	*0419	*0601	*0788	*2264	2*83	3 a.m.
16	*0184	*0245	*0305	*0557	*0695	*1986	2*48	4 a.m.
17	*0261	*0230	*0216	*0111	*0688	*1806	2*25	5 a.m.
Total in the five years						- - -	1*9219 parts of the Total Force.	
Mean hourly value						-	$\frac{1*9219}{24} =$	*0801 = 1*00

When Tables XLI. and XLII. are examined, it is seen that the disturbances increasing the force and those decreasing it, may be generally viewed as parts of one and the same phenomenon, subject to one and the same law, expressed by ratios which in the two cases are approximately the complement of each other, viz., at the hours when the one augments in value, the other diminishes, and *vice versa*; and that the two classes of disturbances, distinguished from each other by the opposite effects which each produces on the mean or normal state of the magnetic force, do in fact constitute when viewed together a diurnal variation of very striking order and regularity, having a maximum of increased force at a certain hour, and a maximum of diminished force at another hour distant nearly twelve hours from the preceding, and forming a regular progression from the hour of the greatest increased force to that of greatest diminished force, and *vice versa*. To see this in its just light, and to obtain the true

proportions in which the magnetic force is increased or diminished at the different hours by the effects of the disturbances, it is necessary to combine the values in Tables XLI. and XLII. somewhat differently from what is done in Table XL. by taking the *differences* instead of the *sums* of the increasing and decreasing values. When we take the sums we investigate the proportion which the *whole amount* of disturbance, whether its effect be to increase or to decrease the force, bears at each hour to the mean hourly value or average of all the hours: the ratios in this case are shown in Table XL. When, on the other hand, we take the differences, we exhibit the amount by which the magnetic force of the earth is either increased or decreased at the several hours by the influence of the disturbances of '0004 and upwards during five years. This is shown in column 4 of Table XLIII.; the values are in parts of the Total Force at Toronto.

TABLE XLIII.

Hours.	Disturbances		General Effect, or accumulated influence at each of the 24 hours in 5 Years.	Average Daily Effect at the different hours.
	Increasing.	Decreasing.		
(1.)	(2.)	(3.)	(4.)	(5.)
18; or 6 A.M.	+ '0113	- '1529	- '4416	- '000092
19; or 7 A.M.	+ '0105	- '1524	- '4419	- '000092
20; or 8 A.M.	+ '0117	- '0892	- '0745	- '000047
21; or 9 A.M.	+ '0088	- '0581	- '0193	- '000032
22; or 10 A.M.	+ '0100	- '0220	- '0120	- '000008
23; or 11 A.M.	+ '0157	- '0057	+ '0100	+ '000007
0; or Noon	+ '0269	- '0032	+ '0237	+ '000015
1; or 1 P.M.	+ '0500	- '0083	+ '0117	+ '000027
2; or 2 P.M.	+ '0715	- '0061	+ '0654	+ '000042
3; or 3 P.M.	+ '0883	- '0046	+ '0837	+ '000054
4; or 4 P.M.	+ '1107	- '0055	+ '1052	+ '000068
5; or 5 P.M.	+ '1184	- '0059	+ '1125	+ '000073
6; or 6 P.M.	+ '0958	- '0061	+ '0897	+ '000058
7; or 7 P.M.	+ '1025	- '0079	+ '0946	+ '000062
8; or 8 P.M.	+ '0796	- '0083	+ '0713	+ '000047
9; or 9 P.M.	+ '0193	- '0255	+ '0238	+ '000016
10; or 10 P.M.	+ '0326	- '0669	- '0343	- '000022
11; or 11 P.M.	+ '0211	- '0961	- '0750	- '000017
12; or Midnight	+ '0192	- '1709	- '1517	- '000098
13; or 1 A.M.	+ '0113	- '2056	- '1943	- '000125
14; or 2 A.M.	+ '0099	- '2151	- '2052	- '000132
15; or 3 A.M.	+ '0122	- '2264	- '2142	- '000138
16; or 4 A.M.	+ '0073	- '1986	- '1913	- '000123
17; or 5 A.M.	+ '0120	- '1806	- '1686	- '000109

We learn from this table that the law of the diurnal variation due to the disturbances of the Total Force at Toronto is as follows:—From 11 A.M. to 9 P.M. inclusive they augment the force; from 10 P.M. to 10 A.M. inclusive they diminish it. The hour of greatest augmentation is 5 P.M.; of greatest diminution 3 A.M. The decreasing effect changes to an increasing effect about midway between 10 and 11 A.M.; the increasing

to a decreasing between 9 and 10 P.M., nearer to 9 than to 10. The greatest diminution is nearly twice as great as the greatest augmentation. The hours of most rapid change are from 7 to 8 A.M., and from 11 P.M. to midnight. From the greatest diminution at 3 A.M. to the greatest increase at 5 P.M. the progression is continuous and uninterrupted, and from the greatest increase at 5 P.M. to the greatest decrease at 3 A.M. it is also continuous, except in a small and apparently accidental interruption at 7 P.M. As the values in column 4 of Table XLIII. are the accumulated values in five years, and as each year comprised about 310 days of observation (or 1,550 days in the five years) we may take an approximate view of the *mean* diurnal variation due to the disturbances equalling or exceeding '0001 in amount. An increase of force at 5 P.M. of '1125 divided by 1,550 days = '000073; and a decrease of force at 3 A.M. of '2142 divided by 1550 = '000138; making together an average diurnal range of '000211 parts of the force, changing progressively from + '000073 at 5 P.M. to - '000138 at 3 A.M.

As it is not probable, on the one hand, that the disturbances of '0001 and upwards comprehend all the disturbances of the class to which they belong, we may regard the preceding range as expressing the minimum limit of the true average daily range of variation due to the disturbances of occasional occurrence; whilst, on the other hand, it appears extremely improbable that the minor effects of the causes which produce the larger disturbances should equal in aggregate value those which exceed '0001. We have, then, the same degree of improbability that the range of the diurnal variation due to all the disturbances of this class should amount to twice the value which has been obtained by this analysis, or to  $'000211 \times 2 = '000422$ . The diurnal range may be regarded as something between '000211 and '000422, but probably nearer to the first than to the last. The final column of Table XLIII. (column 5) shows the average daily effect of the disturbances of '0001 and upwards at every hour of the day and night.



## DECLINATION.

*Analysis of the larger Disturbances.*—To complete the view of the magnetic disturbances at Toronto in the five years ending June 30th 1848, a second and a more perfect analysis has been made of the disturbances of the Declination during that period than that which is contained in the second volume of the Toronto Observations (pp. xxvii—1), which was deemed sufficient for a first approximation when other duties pressed heavily on the time at command.

The disturbances which were then subjected to analysis, were those which differed five scale divisions (3'6 in arc) or upwards from the mean or normal positions of the magnet in the same month and at the same hour, the normal positions being derived from the whole body of the observations, excluding only some very extreme disturbances. The more perfect mode of proceeding is that which has been stated in describing the process adopted in the cases of the Horizontal and Vertical Forces; viz. the subsequent correction of the normal positions by a recalculation in which the *whole* of the disturbances are excluded, and a revision of the disturbances in conformity with the new normals; both processes being repeated until the normals finally adopted are derived from a body of observations including all which differ less, and excluding all which differ more, than a certain fixed value from themselves. At the same time this fixed value has itself been altered by raising the standard considered to constitute a disturbed observation from five scale divisions to seven (*i.e.* from 3'6 to 5'0 of arc), the experience gained in the former investigation having led to the belief that the higher value would constitute in some respects a preferable standard. The number of observations thus separated amounted to 2,172 in the five years of hourly observations ending June 30th 1848, averaging about 1 in 17 of the whole body.

The aggregate values of the disturbed observations in the different years are shown in the following table:—

TABLE XLIV.

Year ending June 30th 1844	-	-	-	2053'2	minutes of arc.
" " 1845	-	-	-	2521'8	"
" " 1846	-	-	-	3246'6	"
" " 1847	-	-	-	5478'7	"
" " 1848	-	-	-	6422'0	"
Total in the five years	-	-	-	19722'3	
Mean annual value	-	-	-	$\frac{19722'3}{5}$	= 3944'5

## DECLINATION: DISTURBANCES.

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The ratios in each year to the mean annual value are as follow:—

TABLE XLV.

Year ending June 30th	1844	1845	1846	1847	1848
	1844	1845	1846	1847	1848
	0'52	0'64	0'82	1'39	1'63

The observations of the Declination were not interrupted in the months from October 1843 to February 1844; consequently the years ending June 30th 1844, 1845, 1846, 1847, and 1848 are here strictly what they profess to be, and the ratios show a continuous progression from a minimum in the first year to a maximum in the last.

Table XLVI. shows the aggregate values in the different years, divided into easterly and westerly disturbances.

TABLE XLVI.

Year ending June 30th	1844	1845	1846	1847	1848	Easterly.	Westerly.
	1844	1845	1846	1847	1848	1235'8	817'4
						1325'4	1196'4
						1973'3	1273'3
						2958'9	2519'8
						3573'5	2818'5
Total in the five years						11066'9	8655'4

The general effect of the larger disturbances is therefore to decrease the westerly Declination at Toronto. The easterly values preponderate in the ratio of 1'28 to 1.

Table XLVII. exhibits the aggregate values of the disturbances distributed into the different *months* of their occurrence, with the ratios which the values in each of the months bear to the mean monthly value or average of all the months.

TABLE XLVII.

Months.	Years ending June 30,					Sums in the Five Years.	Ratios.	Months.
	1844.	1845.	1846.	1847.	1848.			
July	327'9	160'8	159'3	565'1	329'5	1542'6	0'91	July.
August	131'1	280'5	355'4	885'3	242'7	1895'0	1'15	August.
September	164'6	450'1	371'5	828'4	848'9	2633'5	1'62	September.
October	122'7	341'4	263'9	608'5	808'2	2144'7	1'31	October.
November	30'9	305'6	161'8	314'1	469'6	1282'0	0'78	November.
December	50'2	197'0	181'7	121'5	691'4	1244'8	0'76	December.
January	65'5	250'9	142'1	89'6	387'9	936'0	0'57	January.
February	119'4	132'6	125'6	259'8	746'4	1383'8	0'81	February.
March	403'8	106'5	308'5	481'7	521'2	1824'7	1'11	March.
April	389'5	151'0	312'3	750'2	726'0	2329'0	1'42	April.
May	193'1	65'0	349'7	408'5	587'5	1603'8	0'98	May.
June	54'5	80'4	514'8	163'0	59'7	872'4	0'53	June.
Total in the five years						19722'3		
Mean monthly value, $\frac{19722'3}{12} =$						1643'5	=	1'00

September and April are the months of greatest disturbance, and January and June the months of least disturbance. The progression from the maxima to the minima, and from the minima to the maxima, is continuous and uninterrupted.

Table XLVIII. exhibits the aggregate monthly values in the five years separated into easterly and westerly values, with the ratios in each case to the respective mean monthly values, and also the ratios in the different months of the easterly to the westerly values.

TABLE XLVIII.

Months.	Easterly Values.		Westerly Values.		Ratios of the Easterly to the Westerly Values.	Months.
	Sums in the Five Years.	Ratios to the Mean Monthly Values.	Sums in the Five Years.	Ratios to the Mean Monthly Values.		
July	963.2	0.98	639.4	0.89	1.41	July.
August	1255.2	1.36	639.8	0.89	1.96	August.
September	1504.8	1.63	1158.7	1.61	1.29	September.
October	1174.0	1.28	970.7	1.35	1.21	October.
November	556.6	0.60	725.4	1.06	0.77	November.
December	527.4	0.57	717.4	0.99	0.74	December.
January	527.0	0.57	409.0	0.57	1.29	January.
February	772.9	0.84	619.9	0.84	1.27	February.
March	1062.9	1.15	761.8	1.06	1.30	March.
April	1187.5	1.29	1141.5	1.59	1.01	April.
May	661.3	0.98	699.5	0.98	1.29	May.
June	691.1	0.75	181.3	0.25	3.82	June.
Total in the five years, 11066.9			8655.3			
Mean monthly values = 922.2 = 1.00			721.3 = 1.00			

The same general law is seen to prevail in both easterly and westerly disturbances when separately viewed as when they are viewed conjointly; the equinoxes are the epochs of maximum and the solstices of minimum.

The ratios which indicate the proportion in which the easterly disturbances preponderate over the westerly exhibit, on the other hand, a tendency towards a maximum at the June solstice and a minimum at the December solstice. The mean ratio in the months of November, December, and January is 0.93, and in the months of May, June, and July 2.17.

The next table exhibits the aggregate values of the disturbed observations distributed into the different *hours* of their occurrence, with the ratios which the values at each hour bear to the mean hourly value or average of all the hours.

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TABLE XLIX.

Toronto Astronomi- cal Time.	Years ending June 30,					Sums in the Five Years.	Ratios.	Toronto Civil Time.
	1844.	1845.	1846.	1847.	1848.			
0.								
18	93.4	145.3	122.7	206.7	295.6	863.7	1.05	6 a.m.
19	70.7	98.8	139.8	269.0	383.6	961.9	1.17	7 a.m.
20	67.6	122.2	136.1	297.0	423.5	1016.7	1.27	8 a.m.
21	59.1	81.0	129.7	210.2	427.9	916.9	1.11	9 a.m.
22	50.6	89.0	112.2	118.6	311.8	712.2	0.87	10 a.m.
23	37.5	100.2	89.8	119.1	197.3	533.2	0.66	11 a.m.
0	26.2	75.1	57.5	57.2	186.1	491.1	0.49	Noon.
1	29.3	28.8	31.2	42.7	112.6	211.6	0.40	1 p.m.
2	26.8	63.1	23.0	67.7	116.1	327.0	0.40	2 p.m.
3	28.1	57.9	—	105.1	131.9	326.0	0.49	3 p.m.
4	47.9	52.7	40.2	150.9	110.1	441.8	0.53	4 p.m.
5	66.9	51.7	59.1	159.0	111.1	457.3	0.56	5 p.m.
6	97.1	38.2	70.8	262.1	217.9	686.5	0.81	6 p.m.
7	62.8	101.1	225.9	257.1	156.9	801.1	0.98	7 p.m.
8	139.2	186.3	152.5	295.0	228.1	1001.1	1.22	8 p.m.
9	176.3	243.3	251.8	387.1	435.2	1491.7	1.82	9 p.m.
10	220.5	178.9	251.9	380.5	232.2	1267.0	1.55	10 p.m.
11	109.3	97.0	173.5	329.8	311.5	1021.1	1.25	11 p.m.
12	158.2	139.1	193.7	270.5	311.8	1166.3	1.35	Midnight.
13	119.2	118.0	251.1	369.9	389.1	1250.6	1.52	1 a.m.
14	86.7	127.0	176.3	289.5	308.9	988.4	1.21	2 a.m.
15	110.8	71.6	185.0	218.6	307.0	926.0	1.13	3 a.m.
16	69.1	163.1	186.1	329.6	318.3	1096.5	1.31	4 a.m.
17	99.7	82.3	181.5	225.9	266.6	858.0	1.05	5 a.m.
Total in the five years						19722.3		
Mean hourly value,						$\frac{19722.3}{24} = 821.8 = 1^{\circ}05'$		

From 10 A.M. to 7 P.M. inclusive the ratios are invariably below unity, and from 8 P.M. to 9 A.M. inclusive as invariably above unity. The hour of least disturbance is 1 P.M., and of greatest 9 P.M., both being well-marked features. The progression during the hours of the day from 8 A.M. to 9 P.M. is uninterrupted to and from the minimum at 1 P.M., but is much less regular during the hours of the night.

Table L. exhibits the aggregate values separated into their easterly and westerly constituents, with the ratios at each hour to the mean hourly value or average of all the hours.

TABLE L.

Toronto Astronomical Time.	Disturbances.		Ratios.		Toronto Civil Time.
	Easterly.	Westerly.	Easterly.	Westerly.	
17	417.0	441.0	0.91	1.23	5 a.m.
16	662.5	434.0	1.45	1.21	4 a.m.
15	589.5	336.5	1.28	0.94	3 a.m.
14	627.6	360.8	1.37	1.00	2 a.m.
13	824.5	426.1	1.79	1.19	1 a.m.
12	898.9	297.4	1.76	0.82	Midnight.
11	925.4	98.7	2.02	0.27	11 p.m.
10	1104.7	162.2	2.41	0.45	10 p.m.
9	1417.1	77.6	3.09	0.22	9 p.m.
8	899.6	101.8	1.95	0.28	8 p.m.
7	664.9	139.2	1.44	0.39	7 p.m.
6	481.5	205.0	1.05	0.57	6 p.m.
5	200.1	254.2	0.44	0.71	5 p.m.
4	145.1	286.7	0.32	0.80	4 p.m.
3	102.6	223.4	0.22	0.62	3 p.m.
2	93.2	233.8	0.20	0.65	2 p.m.
1	97.7	146.9	0.21	0.41	1 p.m.
0	111.8	289.6	0.24	0.80	Noon.
23	179.9	358.3	0.39	1.00	11 a.m.
22	128.0	584.2	0.28	1.62	10 a.m.
21	99.2	811.8	0.21	2.25	9 a.m.
20	118.1	928.6	0.26	2.58	8 a.m.
19	160.2	801.7	0.35	2.23	7 a.m.
18	207.8	655.9	0.45	1.82	6 a.m.
Total in the } five years. }	11066.9	8655.4			
Meanhourly } values. }	461.1	360.6			

The easterly disturbances are below the average during the hours of the day, or from 5 A.M. to 5 P.M. inclusive, and above the average during the hours of the night, or from 6 P.M. to 4 A.M. inclusive; the westerly disturbances are below the average from noon to midnight inclusive, and above the average, with a single exception at 3 A.M., from 1 A.M. to 11 A.M. inclusive. The easterly have a maximum and the westerly a minimum, both decided features, at 9 P.M.; the westerly have a well-marked maximum at 8 A.M., and the easterly have minima scarcely differing from each other at 9 A.M. and at 1, 2, and 3 P.M. From noon to 5 P.M. both easterly and westerly disturbances are below their respective averages, consequently these are the hours of least general disturbance. From 6 P.M. to 11 P.M. the easterly are so much above their average that they more than compensate for the deficiency of the westerly; from midnight to 5 A.M. both easterly and westerly are above their respective averages (with the slight and apparently accidental exception already noticed at 3 A.M.), and from 6 A.M. to 10 A.M. the high values of the westerly more than compensate for the low values of the easterly disturbances. Excepting at the hours from noon to 5 P.M. inclusive,

when both easterly and westerly disturbances are small, and from 1 A.M. to 5 A.M., when they are both large, there is a systematic tendency to a diminution of easterly disturbance at the hours when large westerly disturbance prevails, and to a diminution of westerly disturbance when large easterly disturbance prevails.

In the following table is shown for each hour (in column 2) the excess of easterly disturbance over westerly, or of westerly over easterly, in the aggregate values of the five years; and in column 3 the mean effect at each hour, or a *daily* average, obtained by dividing the accumulated excess in five years shown in column 2 by 1,552, the number of days of observation in the five years. Column 3, therefore, exhibits the *mean diurnal* variation produced on a general average by the disturbances amounting to or exceeding 5'0 of arc, and which, as a general and systematic effect, is superimposed upon the more regularly occurring diurnal variation derivable from the great body of the observations after the disturbed observations have been individually abstracted.

TABLE II.

Toronto Astro- nomical Time.	Excess of Easterly or Westerly Values at the different Hours.	Mean Diurnal Variation occasioned by the disturbed Observations.	Toronto Civil Time.	Toronto Astro- nomical Time.	Excess of Easterly or Westerly Values at the different Hours.	Mean Diurnal Variation occasioned by the disturbed Observations.	Toronto Civil Time.
	(2.)	(3.)			(2.)	(3.)	
18	448'1 W.	0'29 W.	6 a.m.	6	276'5 E.	0'18 E.	6 p.m.
19	611'5 W.	0'41 W.	7 a.m.	7	525'7 E.	0'34 E.	7 p.m.
20	810'5 W.	0'52 W.	8 a.m.	8	797'8 E.	0'52 E.	8 p.m.
21	712'6 W.	0'46 W.	9 a.m.	9	1339'5 E.	0'87 E.	9 p.m.
22	456'2 W.	0'30 W.	10 a.m.	10	942'5 E.	0'61 E.	10 p.m.
23	178'4 W.	0'11 W.	11 a.m.	11	826'7 E.	0'53 E.	11 p.m.
0	177'8 W.	0'11 W.	Noon.	12	511'5 E.	0'33 E.	Midnight.
1	49'2 W.	0'03 W.	1 p.m.	13	398'4 E.	0'26 E.	1 a.m.
2	140'6 W.	0'09 W.	2 p.m.	14	266'8 E.	0'17 E.	2 a.m.
3	120'8 W.	0'08 W.	3 p.m.	15	253'0 E.	0'16 E.	3 a.m.
4	141'6 W.	0'09 W.	4 p.m.	16	228'5 E.	0'15 E.	4 a.m.
5	54'1 W.	0'04 W.	5 p.m.	17	21'0 W.	0'02 W.	5 a.m.

It is seen by this table that when a daily average is derived from all the disturbances of larger amount (5'0 and upwards) occurring in five years at Toronto they are found to produce a maximum easterly deflection of the Declination magnet of 0'87 at 9 P.M., and a maximum westerly deflection of 0'52 at 8 A.M., the intermediate progression either way being continuous, and only interrupted by a few slight irregularities occurring in the hours of the afternoon when the disturbances are fewest and of least amount. The range is  $0'87 + 0'52 = 1'39$ , which might possibly be increased to 2'0 if the disturbances of the same class which are less than 5'0 could be separated and included in the analysis.

Table III. contains the hourly normals of the Declination for each month from July 1843 to June 1848 inclusive, omitting disturbed observations in which the amount of disturbance equalled or exceeded 7'0 scale divisions or 5'0 of arc.

TABLE LII.

*Hourly Means of the Readings of the Declinometer; omitting disturbed Observations in which*

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.										
	0	1	2	3	4	5	6	7	8	9	10
	TORONTO HOURS.										
	18	19	20	21	22	23	0	1	2	3	4
<b>1843:</b>											
July -	Se. Dec. 131°8	S. Dec. 133°7	Se. Dec. 133°0	S. Dec. 131°1	Se. Dec. 126°8	S. Dec. 122°9	Se. Dec. 119°3	Se. Dec. 117°2	Se. Dec. 117°7	Se. Dec. 118°8	Se. Dec. 120°7
August -	131°1	133°7	133°2	130°3	125°0	121°0	117°0	116°2	117°3	119°5	122°5
September -	129°4	131°7	130°7	127°8	123°4	119°8	116°7	116°5	118°1	119°9	122°4
October -	126°8	128°1	129°4	129°2	126°7	123°2	120°8	120°1	120°3	121°4	122°5
November -	127°8	128°3	129°0	128°7	126°5	123°4	122°1	121°3	122°2	123°3	124°5
December -	127°4	127°7	127°6	128°4	127°7	125°8	123°6	122°5	122°0	123°6	124°6
<b>1844:</b>											
January -	127°1	127°5	128°7	129°6	127°7	125°7	123°1	122°2	122°3	123°3	121°3
February -	128°2	129°0	129°2	128°8	126°5	124°0	121°8	121°3	122°3	123°8	125°2
March -	129°1	129°8	131°0	130°3	127°8	124°0	120°5	119°5	119°5	120°5	121°7
April -	129°1	130°1	130°9	129°3	126°2	121°7	119°1	118°0	118°0	119°3	120°7
May -	130°4	131°4	131°2	129°6	125°5	121°4	118°2	116°5	116°2	117°3	119°8
June -	130°3	131°5	131°4	129°0	124°4	119°6	116°1	114°6	115°3	116°7	118°8
July -	129°1	132°3	132°2	129°8	125°3	120°5	118°0	115°7	115°0	116°8	119°0
August -	130°1	131°5	131°6	127°9	122°8	117°2	115°0	112°8	114°9	115°6	119°5
September -	124°9	125°0	123°9	121°1	116°3	111°5	108°4	109°9	110°8	114°1	117°5
October -	120°8	122°1	122°4	121°4	118°4	111°6	112°3	112°1	112°7	115°1	116°2
November -	118°5	119°3	120°5	120°5	118°5	115°1	113°2	112°0	113°6	114°7	115°6
December -	118°7	118°6	119°0	119°8	119°5	116°9	114°6	113°6	113°5	115°5	116°0
<b>1845:</b>											
January -	117°7	119°8	120°8	119°9	117°8	115°2	113°2	113°1	113°5	115°3	116°2
February -	119°6	120°2	120°5	120°4	118°7	116°0	113°3	112°3	113°0	114°7	116°5
March -	119°7	121°6	122°8	122°5	120°1	116°1	112°7	110°4	110°5	111°3	112°5
April -	121°0	122°3	123°3	122°6	118°5	115°0	110°2	107°6	107°6	108°7	111°7
May -	122°9	124°3	124°0	121°2	115°8	110°4	107°6	107°4	108°1	110°4	113°1
June -	123°3	124°3	124°4	122°1	118°1	112°5	108°5	105°1	107°2	108°4	110°8
July -	121°4	123°7	124°3	123°0	118°7	113°1	108°6	106°1	105°9	107°0	109°1
August -	121°5	123°8	123°6	120°7	114°8	109°1	105°1	103°8	105°2	107°8	111°2
September -	118°2	119°2	118°9	115°7	111°1	107°2	104°7	105°0	106°7	108°8	111°5
October -	115°5	116°1	116°8	115°6	113°4	110°6	108°4	108°2	108°9	110°3	110°8
November -	114°8	116°4	117°2	116°4	114°0	110°2	107°6	108°0	108°8	110°1	111°8
December -	114°9	115°3	116°3	116°4	116°3	114°3	111°9	110°5	110°4	111°5	113°0

## DECLINATION: TABLE OF NORMALS.

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TABLE LII.

*The Amount of Disturbance equalled or exceeded 7.0 Scale Divisions or 5.0 Minutes of Arc.*

in which

		GÖTTINGEN HOURS												
		11	12	13	14	15	16	17	18	19	20	21	22	23
		TORONTO HOURS.												
		5	6	7	8	9	10	11	12	13	14	15	16	17
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
120.7	123.4	125.0	124.9	124.5	125.4	125.2	125.2	127.1	126.7	126.0	126.0	127.1	128.0	
122.5	124.3	124.8	125.0	124.6	125.2	124.9	125.0	124.8	124.7	126.4	125.8	126.2	128.2	
122.4	123.6	124.2	124.2	123.4	127.2	125.4	124.5	126.0	126.0	126.0	126.1	125.6	126.7	
122.5	123.9	124.7	125.4	125.5	126.1	125.9	126.5	125.2	126.0	125.8	125.6	126.5	126.6	
124.5	125.2	126.6	127.5	127.3	127.1	127.2	127.3	126.1	125.8	125.5	126.0	126.9	127.2	
124.6	126.0	126.9	127.1	127.6	127.9	127.7	127.1	126.7	126.1	125.5	126.0	126.4	126.9	
124.3														
125.2	125.5	126.2	127.3	127.4	127.9	128.2	127.2	126.6	126.5	126.5	126.9	127.4	126.2	
121.7	125.5	125.7	126.3	127.4	127.6	127.7	127.0	126.3	126.5	126.3	127.2	127.4	128.6	
120.7	123.8	124.6	126.0	126.2	125.9	127.1	127.4	127.5	127.0	127.2	126.6	127.7	128.0	
119.8	122.5	123.8	123.5	125.7	125.2	126.4	127.6	126.0	126.0	126.4	126.3	126.7	127.9	
118.8	121.8	122.9	124.0	123.5	124.7	124.7	125.2	124.0	125.4	125.4	125.3	125.7	128.2	
119.0	121.0	122.1	122.6	122.7	122.6	123.4	124.4	123.4	124.1	124.7	124.3	126.0	128.1	
119.5	120.9	122.6	123.3	122.7	123.1	124.1	124.1	124.6	125.1	124.0	124.2	125.0	127.4	
117.5	121.9	123.3	123.5	123.3	123.0	123.7	123.9	124.2	123.9	123.5	123.0	124.5	126.2	
116.2	118.4	118.7	118.3	119.0	118.7	119.7	118.2	120.2	119.0	120.0	119.8	121.9	122.0	
115.6	116.5	117.4	117.9	119.0	118.2	119.3	118.3	118.7	118.1	118.7	118.1	119.2	119.6	
116.0	116.9	117.9	118.9	118.3	119.0	119.4	118.9	118.7	117.4	117.0	118.1	117.7	118.4	
	116.8	117.9	118.3	118.8	119.6	118.8	119.8	118.5	117.9	116.9	117.1	117.6	118.3	
116.2														
116.5	117.2	118.4	118.5	119.0	119.4	119.0	118.3	117.3	117.6	117.9	117.9	119.3	118.2	
12.5	116.5	117.8	117.6	118.3	120.0	118.6	118.1	118.9	117.3	117.5	118.4	118.6	118.3	
11.7	114.7	116.4	117.7	117.5	117.7	118.6	118.7	118.3	118.4	118.7	118.5	118.7	118.9	
13.1	114.7	116.4	117.1	117.0	117.0	117.2	118.0	117.4	117.8	117.2	118.2	118.5	119.3	
10.8	115.6	116.3	116.1	116.3	115.7	115.9	116.3	116.1	116.8	116.8	117.6	118.4	120.3	
09.1	113.7	115.3	115.5	115.1	115.2	115.1	115.9	115.6	116.3	116.1	115.8	117.8	120.3	
11.2	111.6	114.0	114.9	114.4	114.8	116.1	116.3	115.3	115.9	114.7	115.1	116.2	118.7	
11.5	113.2	114.0	114.4	114.0	114.9	115.2	115.7	114.8	114.0	114.5	115.1	115.0	117.9	
10.8	113.4	114.0	114.3	114.1	114.2	113.1	113.7	114.0	114.0	115.8	116.8	117.5		
11.8	111.7	112.1	112.9	112.8	113.7	113.7	113.8	114.2	114.0	115.0	115.7	115.6	116.5	
13.0	112.4	113.4	114.7	114.6	114.6	114.6	114.4	113.6	113.4	113.2	113.9	113.4	114.6	
	114.3	115.1	116.0	116.6	116.8	116.3	116.3	116.5	115.3	114.5	115.8	115.4	115.4	

(Continued on p. 153.)



TABLE LII.—*continued.*

Periods to which the Hourly Means correspond.	GÖTTINGEN HOURS.											
	0	1	2	3	4	5	6	7	8	9	10	
	TORONTO HOURS.											
	18	'9	20	21	22	23	0	1	2	3	4	
1846:	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.	Se. Div.
January -	115'5	116'4	118'3	118'6	116'6	114'2	111'2	109'6	110'3	111'1	112'9	
February -	115'6	116'4	117'8	117'1	115'2	112'9	110'6	109'3	109'3	110'4	111'9	
March -	116'4	117'6	120'1	119'5	116'8	112'1	108'7	106'4	106'1	106'4	109'2	
April -	117'5	119'4	119'4	117'7	114'4	109'5	106'7	104'4	104'7	105'0	107'4	
May -	118'6	120'0	120'1	117'7	113'5	107'9	104'5	102'3	103'5	105'3	107'7	
June -	119'5	121'2	120'7	119'0	115'8	111'4	107'8	104'9	104'1	105'2	106'3	
July -	117'9	122'4	121'4	119'9	116'9	111'8	109'0	106'3	105'9	105'7	106'9	
August -	118'5	122'0	121'8	119'8	113'9	109'3	105'0	103'7	103'0	104'4	107'2	
September -	117'2	119'4	118'2	116'4	111'4	107'0	103'8	103'4	104'4	108'2	111'7	
October -	115'7	116'2	118'0	117'0	114'8	110'7	107'6	106'4	106'4	108'6	110'3	
November -	114'6	114'7	117'0	118'4	115'8	113'1	109'8	108'2	108'1	108'9	109'9	
December -	114'9	115'5	116'5	117'7	116'5	113'9	110'7	109'4	109'0	109'7	110'7	
1847:												
January -	115'5	115'7	117'6	117'8	115'7	113'2	110'6	109'2	109'7	111'0	112'3	
February -	114'1	115'2	115'9	114'0	112'4	109'6	107'1	106'9	107'1	108'4	109'2	
March -	113'6	115'2	117'5	117'3	114'5	109'5	105'0	102'3	102'9	103'6	105'2	
April -	115'4	117'9	117'6	115'7	112'2	106'1	102'3	101'0	101'7	103'9	106'6	
May -	118'2	118'7	118'4	116'1	111'2	106'0	101'2	102'8	102'5	104'3	106'4	
June -	117'7	119'0	118'9	116'6	112'4	107'8	101'1	101'6	102'1	103'4	105'6	
July -	119'3	121'1	120'6	118'0	112'7	107'6	103'8	102'0	102'3	104'2	106'7	
August -	119'8	122'2	122'7	119'3	112'4	106'8	101'4	98'4	99'4	102'7	105'7	
September -	116'9	119'3	120'2	118'4	112'4	107'3	101'5	99'5	100'9	104'1	107'2	
October -	113'9	116'4	118'8	117'9	114'5	109'5	105'1	101'1	104'5	106'2	107'6	
November -	113'5	113'9	116'9	115'5	114'3	110'8	106'7	101'5	104'7	105'8	106'2	
December -	112'1	113'3	111'7	116'0	115'1	111'4	109'8	107'1	105'7	107'2	107'7	
1848:												
January -	112'9	112'9	116'5	117'7	116'1	112'7	108'3	106'2	105'9	105'9	106'2	
February -	119'6	119'1	122'8	121'9	123'1	119'9	116'2	113'1	111'2	110'9	111'5	
March -	120'4	123'6	124'9	125'4	121'8	116'6	110'6	108'6	107'2	108'4	110'9	
April -	121'1	123'1	123'6	122'7	118'3	114'1	110'7	108'0	107'9	109'0	111'1	
May -	124'3	125'9	125'1	122'8	116'8	111'3	107'5	105'8	105'8	107'5	109'7	
June -	123'8	125'7	125'6	123'8	118'9	112'6	108'5	106'6	105'7	107'7	110'4	

## DECLINATION: TABLE OF NORMALS.

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TABLE LII.—*continued.*

GÖTTINGEN HOURS.												
11	12	13	14	15	16	17	18	19	20	21	22	23
TORONTO HOURS.												
5	6	7	8	9	10	11	12	13	14	15	16	17
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
112'9	114'3	114'9	115'9	116'2	116'4	115'4	115'2	114'2	114'4	114'4	115'6	115'3
111'9	112'2	113'1	114'5	115'4	114'5	114'4	113'8	113'7	114'1	114'4	114'9	115'9
109'2	111'0	112'7	112'8	113'7	114'5	114'8	114'7	114'1	114'1	114'8	115'2	115'5
107'4	109'2	111'2	112'0	112'7	113'9	114'2	114'7	114'8	115'5	114'8	115'3	115'5
105'7	109'9	111'2	111'5	112'2	113'6	114'6	114'9	113'3	114'1	113'0	113'0	112'8
103'3	109'5	111'3	111'2	112'3	112'7	114'1	114'6	113'8	112'6	111'6	111'6	113'7
101'9	109'9	111'1	112'4	112'8	113'6	114'2	115'4	115'0	114'4	114'3	112'1	114'1
100'9	110'1	110'3	111'3	112'4	114'4	113'8	112'7	114'3	115'2	112'4	113'8	112'1
100'2	110'2	112'4	111'6	111'9	111'4	113'7	112'1	112'1	112'7	114'2	114'5	115'3
100'3	111'2	112'6	112'9	113'9	115'2	113'7	114'8	114'2	113'5	113'9	113'6	114'2
100'9	110'4	111'4	113'4	114'2	114'3	114'2	113'9	114'0	111'9	112'6	113'8	113'9
100'7	112'4	113'2	114'1	115'4	115'7	115'4	115'2	114'8	113'7	114'1	114'3	115'1
100'4	113'0	113'6	114'0	115'2	115'6	115'1	115'0	114'2	114'1	115'0	114'8	115'0
100'2	110'4	111'6	112'1	111'7	112'8	112'4	111'7	112'1	111'9	112'8	113'1	114'1
100'2	109'7	108'6	109'6	110'4	111'1	112'0	112'0	111'8	112'0	111'5	112'7	112'4
100'6	109'7	109'7	110'4	111'4	111'6	111'8	111'6	111'7	111'1	111'3	112'6	112'8
100'4	109'3	110'4	110'6	110'2	110'1	109'9	110'0	111'2	111'0	110'5	110'8	113'4
100'6	108'1	109'4	109'8	109'1	109'8	110'0	111'4	111'3	110'0	109'7	110'3	112'5
100'7	109'4	110'5	110'0	109'1	110'1	111'0	111'0	111'5	111'0	111'4	111'4	112'0
100'7	108'3	110'2	109'9	109'8	111'0	110'7	111'2	110'8	111'8	111'8	112'5	113'7
100'2	109'8	110'4	109'6	109'7	111'5	111'0	111'0	111'9	112'0	111'7	112'2	112'4
100'6	108'1	108'4	109'3	110'4	110'7	110'6	110'9	111'7	112'5	113'1	113'4	113'0
100'2	107'8	110'1	110'3	111'9	112'0	113'1	111'2	111'8	111'0	112'0	112'8	112'4
100'7	109'0	111'0	111'1	111'6	112'8	113'3	112'7	112'4	112'1	112'7	112'6	112'8
100'2	107'4	108'9	109'3	111'3	111'6	112'2	112'2	113'3	111'9	111'8	112'4	112'2
100'5	111'9	112'8	111'0	116'1	116'5	118'7	118'1	118'2	118'6	117'0	117'8	117'0
100'9	115'0	114'1	113'4	114'5	115'1	115'5	117'6	119'0	118'4	119'7	119'7	119'6
100'1	112'9	113'8	115'2	116'9	115'8	116'7	115'1	116'8	117'8	118'1	118'3	118'0
100'7	113'1	114'6	115'6	115'0	115'5	115'9	115'5	116'3	116'7	117'1	116'3	117'8
100'4	113'9	115'5	116'7	116'3	116'0	115'6	116'1	116'7	116'2	115'4	115'9	117'5

## GENERAL CONCLUSIONS.

In a communication made to the Royal Society on the 18th of March 1852, it was shown that the larger disturbances of the Declination, both at Toronto and at Hobarton, indicated, by the variation in their numbers and aggregate values in different years, the existence of a *periodical inequality*, of which the extreme and opposite phases were five years distant from each other, and the years 1843 and 1848 were respectively the epochs of minimum and maximum. The examination which had led to this conclusion comprehended the years from 1841 to 1848 inclusive, and was definite in respect to 1843 as the year of minimum; inasmuch as 1841, 1842, and 1843 showed a progressive *decrease* in the number and aggregate value of the larger disturbances in each year, whilst from 1843 to 1848 there was a progressive *increase* of both in successive years.

It was noticed in the same communication that the regular *diurnal* variations of each of the three magnetic observation-elements at Toronto and Hobarton, the Declination, the Horizontal Force, and the Vertical Force, and of each of the two derived elements, the Inclination and the Total Force, exhibited evidences of a corresponding periodical inequality in the amplitude or extent of the diurnal variation, the years 1843 and 1848 being also epochs respectively of minimum and maximum. The observation of one of the elements, the Declination, extending uninterruptedly at both stations over eleven entire years, or from 1841 to 1851 inclusive, distinctly marked 1843 as the year of maximum, as well as 1848 as the year of minimum.

This discovery of the existence of a periodical inequality, common to the magnetic disturbances of larger amount and to those more regular diurnal magnetic variations of which the sun has been long recognised as the primary cause, (inasmuch as they conform systematically to laws depending on solar time,) was regarded as affording presumptive evidence of the subsistence of a causal connection common to those two classes of phenomena; which presumption was corroborated by facts adduced in the same communication, proving that the disturbances are themselves subject, on the average, to a well-marked diurnal period regulated also by solar time.

The periodical inequality thus manifested, having its opposite phases of maximum and minimum separated by an interval of five years, and of which the cycle might therefore be conceived to include about ten of our solar years, did not appear to connect itself with any of those divisions of time with which we are conversant, as depending upon the relative circumstances of the sun, and the earth and her satellite. The cycle might or might not be one of regular and unfailling recurrence. The observational evidence to which we are indebted for a knowledge of its existence, though sufficiently decisive as far as the period of observation extended, could only be viewed, in reference to a permanently cyclical character of the phenomenon, as fragmentary, and as the commencement of an investigation which would require to be pursued in one or more of the permanent magnetic observatories established in our own and other countries.

Had no other circumstance presented itself to give additional interest to an investigation which held out at least a fair promise of making known laws of definite order and sequence in phenomena which have excited so much attention of late years, but of which so little has hitherto been ascertained,—had, for example, the decennial period, which appeared to prevail with precisely corresponding features in two distinct classes of the magnetic variations, connected itself with no other periodical variation either of a terrestrial or cosmical nature with which we are acquainted,—there might have been, indeed, little reason to apprehend, in these days of physical curiosity and inductive application, that the investigation would have been suffered to drop; but the interest and importance of the inquiry have doubtless been greatly enhanced by the remarkable coincidence, which it was the object of the paper communicated to the Royal Society in March 1852 to announce, between the above-described periodical inequality by which the magnetic variations referable to solar influence are affected, and the periodical inequality which has been discovered by M. Schwabe to exist in the frequency and magnitude of the solar spots. The coincidence, as far as we are yet able to discover, is absolute; the duration of the period is the same, and the epochs of maximum and minimum fall in both cases on the same years. The regularity with which the alternations of increase and decrease have been traced by M. Schwabe in his observations of the solar spots (which have been now continued for about thirty years), must be regarded as conferring a very high degree of probability on the systematic character of causes which as yet are known to us only by the visible appearances which they produce on the sun's disk, and by the disturbances which they occasion in the magnetic direction and force at the surface of our globe. As a discovery which promises to raise terrestrial magnetism to the dignity of a cosmical science, we may feel confident that, although the colonial observatories have been brought to a close, the investigations, which they have thus successfully commenced, will be pursued to their proper accomplishment in those national establishments which have a permanency suitable for such undertakings.

The conclusions which have been hitherto drawn, both in the Philosophical Transactions and in the introductory discussions in the Toronto and Hobarton volumes, regarding the periodical laws of the disturbances at those stations, have been confined exclusively to the disturbances of a single element, viz. the Declination. It was fully recognised that each of the other two observational elements, viz. the Horizontal and the Vertical Force, might be expected to furnish concurrent, but strictly independent, evidence of the periodical affections to which the magnetic disturbances are subject; but the work to be accomplished for the elaboration of that evidence was considerably greater than in the case of the Declination, from the necessity of eliminating the influence of changes of temperature on the magnets employed in measuring the variations of the Horizontal and Vertical Forces, before these disturbances could be separated for analysis. The labour required in the different processes of reduction has now been gone through, and statements of the results in full detail are contained in the

preceding pages of this volume: it now remains to bring together in one view the evidence which the three observational and the two derived elements furnish of the periodical laws—decennial, annual, and diurnal—which regulate the occurrence of the larger disturbances.

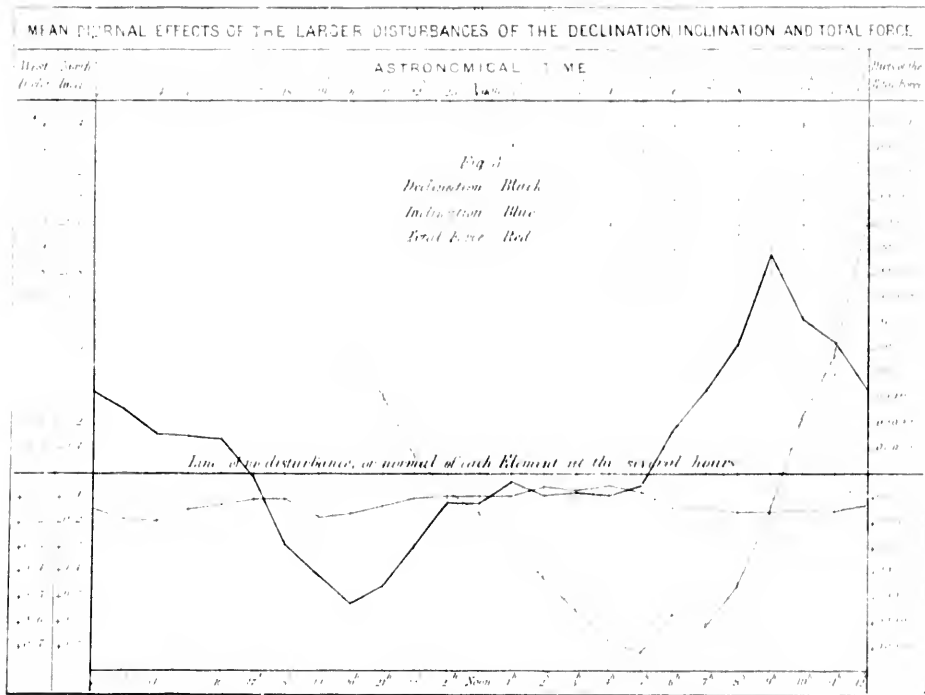
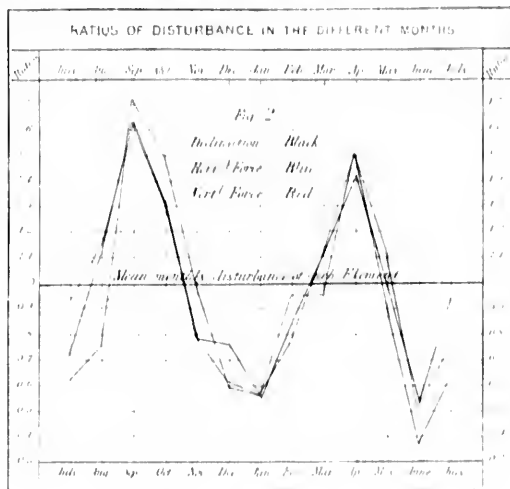
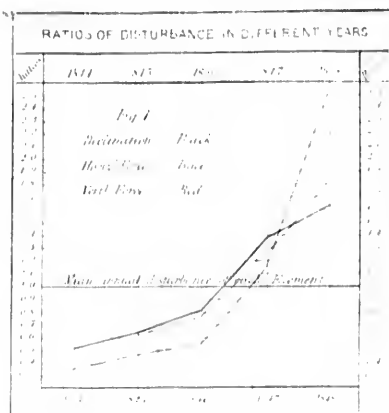
*Decennial Period.*—In respect to the decennial period, it must be regarded as a fortunate circumstance that the five years of hourly observation, which were commenced before the existence of any inequality of longer duration than a year was suspected, began with 1843, the year of minimum, and closed with 1848, the year of maximum disturbance, so that the variation has been followed through a complete phase. This has been strictly the case in the Declination and Horizontal Forces, and with a single exception in the Vertical Force also, the exception being caused by the interruption of the observations of that element, (for purposes explained elsewhere,) during the months of October, November, and December 1843, January and February 1844. These months have been supplied, in the year ending June 1844, from hourly observations made with the same apparatus in the preceding year, viz. in the months of October, November, and December 1842, January and February 1843, thus rendering the five years of the Vertical Force complete for the investigation of the *annual* and *diurnal* variations; but, of course, in regard to the *decennial* period the months taken from a different year, even though it be the adjacent one, are an imperfect substitute. The effect of this substitution has been in fact, as shown in p. xxix, to swell the aggregate value of the disturbances of the Vertical Force in the year nominally ending June 30, 1844, but really comprising five months taken from a preceding year, so as to make them slightly exceed the aggregate value in the year ending June 30, 1845. A similar slight excess in the aggregate value of the disturbances of the Horizontal Force in the year ending June 1844, over the aggregate value in the year ending June 1845, is shown (p. ix) when the same five months of the preceding year are substituted for its own months; but when, in the case of the Horizontal Force (the observations of which were not suspended, as were those of the Vertical Force), the actual observations throughout the year ending June 1844 are taken, the true progression is restored, and the apparent anomaly disappears.\*

\* When the disturbances are taken from the observations of the months actually belonging to the year ending June 1844, the aggregate values of the disturbed observations of the Horizontal Force in the different years are as follow:—

Year ending June 30,			Ratios.
1844	-	6016·5	0·35
" " 1845	-	8032·4	0·47
" " 1846	-	9479·2	0·55
" " 1847	-	19700·4	1·14
" " 1848	-	42905·3	2·49
Total in the five years	-	86133·5	
Mean annual value	-	17226·7	= 1·00



ILLUSTRATIONS OF THE MEAN EFFECTS OF THE LARGER DISTURBANCES



The variations of the three magnetic elements being measured by instruments wholly distinct and unconnected with each other, each element affords an independent evidence of the progressive increase in the aggregate values of the larger disturbances during the period under examination. The sum of the aggregate values of each element in the five years, divided by 5, gives the *mean* annual value of that element, which we may take in each case as equal to 1·00, for the purpose of comparison with the *actual* aggregate values in the different years. We have then the ratios of the disturbances of the different elements in the different years as follows:—

TABLE LIII.

	Declination.	Horizontal Force.	Vertical Force.	Mean.
Year ending June 30, 1844	0·52	0·35	0·65*	0·41
" " 1845	0·61	0·47	0·58	0·57
" " 1846	0·82	0·55	0·73	0·70
" " 1847	1·39	1·14	1·23	1·25
" " 1848	1·63	2·49	1·80	1·97

The final column has been added to show the mean ratio of disturbance in each year as derived from the three elements, measured by the aggregate value in each year of all the disturbances which exceeded a certain definite magnitude in each element, the same magnitude being taken throughout the five years.

It is seen by this table that in the year ending June 1847 the ratio of disturbance is above twice as great, and in the year ending June 1848 nearly four times as great, as in either of the years ending June 1844 or June 1845. In the year ending June 1848, which is the year of maximum, the proportion is nearly five times as great as in the year ending June 1844, which is the year of minimum. The evidence of the existence of a decennial period borne by the disturbances of the Declination receives the fullest confirmation from the variations in different years of the disturbances of the Horizontal and Vertical Forces.

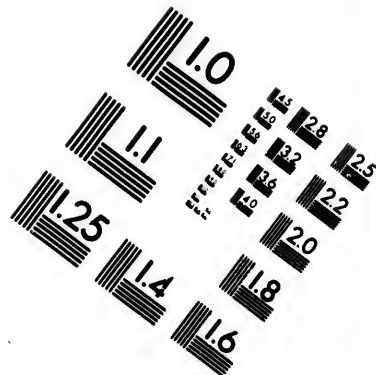
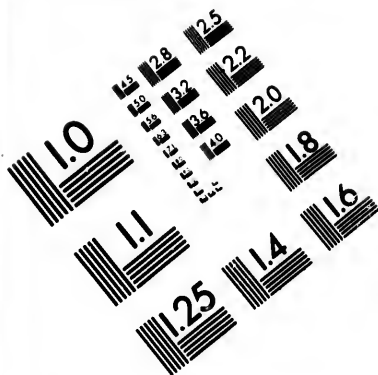
Fig. 1. pl. 1. has been drawn in illustration of the progressive increase of disturbance in each of the three elements between the year ending June 1844 and the year ending June 1848. The dotted horizontal line represents the *mean* or *average* annual disturbance in each element, and is the zero line, or unit, with which the *actual* aggregate values of the disturbance of each element in each year are compared: the Declination is represented by a black line, the Horizontal Force by a blue line, and the Vertical Force by a red line. The rate of increase of disturbance is seen to be much slower in the first half than in the second half of the five years.

*Annual Period.*—The sum of the aggregate values of the disturbances of each element in the five years, divided by 12, gives the *average monthly* disturbance-value

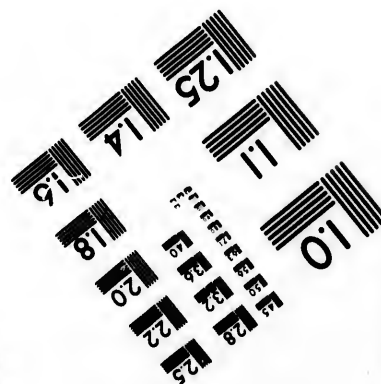
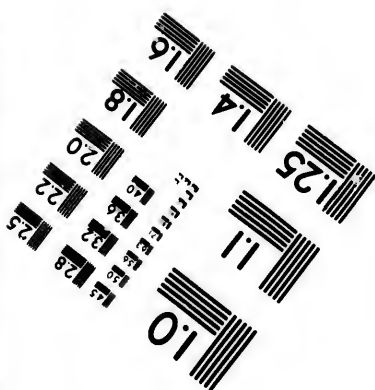
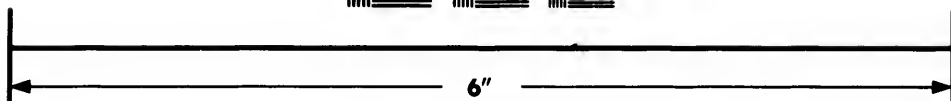
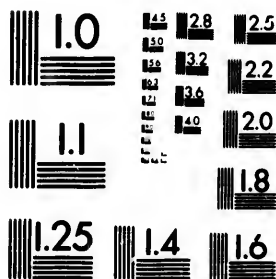
\* In the deduction of this number, five months of the preceding year have been substituted for five months of the year ending June 1844; it has not been included, therefore, in the final column which shows the *mean* ratios in each year.







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for that element, which being taken as = 1.00, and compared with the *actual* monthly disturbance-values, gives the ratios in the following table :—

TABLE LIV.

Months.	Declination.	Horizontal Force.	Vertical Force.	Mean.
July - - -	0.94	0.61	0.71	0.75
August - - -	1.16	0.75	1.08	0.99
September - - -	1.62	1.71	1.61	1.64
October - - -	1.31	1.48	1.29	1.36
November - - -	0.78	0.98	0.75	0.84
December - - -	0.76	0.58	0.61	0.65
January - - -	0.57	0.56	0.57	0.57
February - - -	0.84	0.94	0.74	0.84
March - - -	1.11	0.94	1.08	1.04
April - - -	1.42	1.50	1.49	1.47
May - - -	0.98	0.90	1.12	1.00
June - - -	0.53	0.36	0.50	0.46

The evidence afforded by each of the three observational elements in regard to annual variation is to one and the same effect. January and June are the months of minimum disturbance, September and April the months of maximum disturbance. The aggregate value of the disturbances in the equinoctial months is about three times as great as in the solstitial months. Of the two equinoctial months the value is somewhat higher in each element in September than in April; and of the two solstitial months December is higher than June, also in each of the three elements.

Fig. 2. pl. 1. has been drawn in illustration of the annual variation which has been thus described. The dotted horizontal line is the *mean* monthly disturbance of each element (*i.e.* the sum of the disturbance in the twelve months, divided by 12). The black line for the Declination, the blue line for the Horizontal Force, and the red line for the Vertical Force, show in each case the variation in the proportion which the actual disturbances in each month bear to the *mean* monthly disturbance in the same element. The correspondence of the three elements could scarcely be more perfect.

The annual variation which has been thus deduced has reference exclusively to the variable amount in the different months of the sums of the aggregate values of the disturbances of each element, without distinguishing apart or separating the disturbances which cause easterly deflections and those which cause westerly deflections; or those which increase and those which decrease the Horizontal and Vertical Forces. When this separation is made, we continue to find that each of the two portions into which the disturbances of each element are divided, exhibits distinctly and notably the same general features which have been derived from their conjoint consideration. The equinoxes are in all cases the epochs of maxima and the solstices of minima. But when we study more carefully the relative prevalence of disturbances of particular

character at different periods of the year,—which we may do by forming tables of the relative proportion which the aggregate values in the different months of the easterly disturbances bear to the aggregate values in the same months of the westerly disturbances, and the disturbances which decrease the force bear to those which increase it,—we find that indications present themselves of an annual variation of a different kind from that which has been hitherto described, namely, an annual variation in the *character* of the disturbances of two at least of the elements which have been observed; and although a greater length of time and a greater amount or continuance of observation may be required for the satisfactory establishment of such a periodical variation, its present indications ought not to be overlooked, since the range of the variation is of considerable magnitude, and its systematic character as distinctly marked as could well be expected in an *annual* variation derived from not more than *five* years of repetition. The elements in which these phenomena are most distinctly noticeable are the Declination and the Vertical Force, and the correspondence between the indications of these two elements is in many respects very remarkable. In both elements, when the relative proportions are taken,—in the Declination, of the aggregate values in the different months of easterly and of westerly disturbances; and in the Vertical Force, of disturbances which decrease and disturbances which increase the force,—we find that in both cases the proportions vary from a minimum at the southern solstice to a maximum at the northern solstice, the equinoxes being intermediate. At the northern solstice easterly disturbances are in considerable excess, as are disturbances which decrease the Vertical Force; at the southern solstice, the excess is on the other side; westerly disturbances then predominate, as do the disturbances which increase the Vertical Force. The relative proportion of the aggregate values of easterly to westerly disturbances of the Declination, and of disturbances which decrease the Vertical Force to those which increase it, varies from the one solstice to the other, approximately, as three to one, and in both elements nearly alike.

In the Horizontal Force the disproportion between the values of the disturbances which increase the force and those which decrease it is so great (decreasing disturbances *greatly* preponderating at all periods of the year) that a variation corresponding to that of the two other elements is not so simply arrived at; but it may be stated generally that the proportion of decreasing disturbances is greater at the epoch of the southern solstice than at that of the northern solstice.

*Diurnal Variation.*—Before we proceed to examine the diurnal variation of the Declination, Inclination, and Total Force which it is the average effect of the larger disturbances to produce, it may be desirable to show the proportions in which the disturbances of the three *observed* elements occur at the different hours. This is expressed in the following table by the ratio which the aggregate values in the five years of the disturbances at each particular hour bear to the mean or average disturbance at all the hours in the same five years taken as the unit.

TABLE LV.

Toronto Astronomical Hours.	RATIOS.			Toronto Civil Hours.
	Declination.	Horizontal Force.	Vertical Force.	
18	1'05	1'00	1'21	6 a.m.
19	1'17	1'40	1'15	7 a.m.
20	1'27	1'20	0'80	8 a.m.
21	1'11	1'00	0'54	9 a.m.
22	0'87	1'00	0'36	10 a.m.
23	0'66	0'90	0'34	11 a.m.
0	0'49	0'87	0'46	Noon.
1	0'30	0'76	0'63	1 p.m.
2	0'40	0'66	0'77	2 p.m.
3	0'40	0'66	0'87	3 p.m.
4	0'53	0'61	1'04	4 p.m.
5	0'56	0'66	1'07	5 p.m.
6	0'84	0'59	1'01	6 p.m.
7	0'98	0'76	1'05	7 p.m.
8	1'22	0'75	0'89	8 p.m.
9	1'82	0'90	0'74	9 p.m.
10	1'55	1'03	0'85	10 p.m.
11	1'25	1'14	0'93	11 p.m.
12	1'35	1'22	1'39	Midnight.
13	1'52	1'58	1'58	1 a.m.
14	1'21	1'60	1'61	2 a.m.
15	1'13	1'37	1'73	3 a.m.
16	1'34	1'14	1'51	4 a.m.
17	1'05	1'02	1'41	5 a.m.

From the systematic increase and decrease of the ratios at the different hours, it is obvious that the disturbances of each element, when viewed on the average of a sufficient body of observations, are regulated by laws which have a diurnal period. The diurnal variation thus presented is far, however, from being identical in each of the three elements. The maximum disturbance takes place, indeed, in all the elements during the hours of the night, and the minimum disturbance during the hours of the day; but the particular hours of maximum and minimum are different in the three cases. The hour of maximum in the Declination, for example, is 9 p.m., when the disturbances of the Horizontal and Vertical Forces are both even *less than the hourly average*: and the Horizontal and Vertical Forces do not reach their hours of maximum until, respectively, 2 and 3 a.m., when the disturbances of the Declination have notably declined. So in respect to the hour of minimum: that of the Declination, 1 p.m., is nearly midway between that of the Vertical Force at 11 a.m. and that of the Horizontal Force at 4 p.m., the disturbance of the Horizontal Force being still high when that of the Vertical is a minimum, and the disturbance of the Vertical Force being still high when that of the Horizontal Force is a minimum. Speaking generally, the disturbances of the three elements are above the average in the hours of the night and early morning, and below the average during the hours of the day; to the latter, however, there is an exception in the Vertical Force, which is above the average from 4 to 7 p.m. In the Declination the aggregate value of the disturbances at the hour of

maximum is about six times as great as at the hour of minimum; in the Horizontal Force, about 2·7 as great; and in the Vertical Force, about five times as great.

In the ratios of the Declination-disturbances at the different hours shown in the preceding table we have the joint effects of two classes of disturbances, those which produce easterly and those which produce westerly deflections; and in the ratios of the disturbances of the Horizontal and Vertical Forces at the different hours, we have the further complication that the variations of the Horizontal and Vertical Forces do not bear a simple relation to those of the theoretical equivalents to which they are due,—viz. the Inclination and the Total Force,—but involve quantities dependent on the resolution of forces, which, when the Inclination is great, as it is at Toronto, have a tendency to mask the simplicity of the variations of the Inclination and of the Total Force, as they would appear if they were the subjects of direct observation. In the following table, therefore, are placed the proportions at the different hours in which the six classes of phenomena respectively vary, viz. the disturbances which produce easterly and those which produce westerly deflections, those which increase and those which decrease the Inclination, and those which increase and those which decrease the Total Force.

TABLE LVI.

Toronto Astronomical Hours.	RATIOS OF DISTURBANCE.						Toronto Civil Hours.
	Of the Declination producing		Of the Inclination producing		Of the Total Force producing		
	Easterly Deflection.	Westerly Deflection.	Increase of Inclination.	Decrease of Inclination.	Increase of Force.	Decrease of Force.	
19	0·45	1·82	0·82	0·83	0·27	1·91	6 a.m.
19	0·35	2·23	1·29	0·51	0·26	1·91	7 a.m.
20	0·26	2·58	1·14	0·62	0·37	1·12	8 a.m.
21	0·21	2·25	1·05	1·37	0·22	0·65	9 a.m.
22	0·28	1·62	0·96	1·47	0·25	0·28	10 a.m.
23	0·39	1·01	0·89	1·80	0·39	0·07	11 a.m.
0	0·24	0·80	0·93	1·75	0·67	0·04	Noon.
1	0·21	0·41	0·87	1·70	1·25	0·10	1 p.m.
2	0·20	0·65	0·65	1·92	1·79	0·08	2 p.m.
3	0·22	0·62	0·71	1·36	2·21	0·06	3 p.m.
4	0·32	0·80	0·61	1·46	2·77	0·07	4 p.m.
5	0·44	0·71	0·79	1·35	2·96	0·07	5 p.m.
6	1·05	0·57	1·01	0·72	2·39	0·07	6 p.m.
7	1·44	0·39	1·14	1·02	2·56	0·09	7 p.m.
8	1·95	0·28	1·12	0·55	1·99	0·09	8 p.m.
9	3·09	0·22	1·17	0·58	1·23	0·31	9 p.m.
10	2·41	0·45	1·18	1·39	0·81	0·83	10 p.m.
11	2·02	0·27	1·19	0·81	0·53	1·19	11 p.m.
12	1·76	0·82	1·10	0·85	0·46	2·14	Midnight.
13	1·79	1·19	1·32	0·70	0·26	2·57	1 a.m.
14	1·37	1·00	1·33	0·37	0·22	2·70	2 a.m.
15	1·28	0·91	1·05	0·48	0·28	2·81	3 a.m.
16	1·18	1·21	0·90	0·48	0·18	2·48	4 a.m.
17	0·91	1·23	0·76	0·55	0·28	2·24	5 a.m.

We learn from this table that the laws which regulate the occurrence of easterly and westerly disturbances of the Declination are not on the one hand similar, nor on the other hand are they always complementary to each other. Thus from 1 P.M. to 5 P.M. both classes are considerably below the average, and from 1 A.M. to 5 A.M. both classes, with a slight exception, are above the average; whilst from 6 P.M. to 11 P.M. easterly disturbances greatly exceed, and westerly fall greatly short, of the average; and from 6 A.M. to 11 A.M. westerly exceed and easterly fall short of the average. In the Inclination and Total Force the complementary character of the opposite affections of each element is somewhat more extensively manifested: thus, the disturbances which increase the Inclination are below the average from about noon and the early hours after noon, when those which decrease it are above the average; and are below the average from about midnight and the early hours after midnight, when those which increase the same element are above the average. In the Total Force, from 1 A.M. to 8 A.M. the disturbances which increase the force are greatly above, as those which decrease the force are greatly below, the average,—a contrast which is reversed from 1 A.M. to 8 A.M., the disturbances which decrease the force being then greatly above, whilst those which increase it are greatly below, the average. In neither of the two elements, however, does the complementary character exclusively prevail. It may be remarked, that in all the instances which have been thus brought into view, treating successively the diurnal variations of the disturbances of each of the three elements, the parallel cases which have been cited, whether of identity or of contrast, fall, without exception, on homonymous hours—a circumstance which affords additional evidence of the systematic character of the affections of which we are treating.

There does not appear to be any uniform cotemporaneous connection between the prevalence of either easterly or westerly Declination-disturbance, and that of disturbances which either increase or decrease the Inclination or the Total Force. Thus, for example, the hours at which the disturbances which increase the Total Force are most notably above the average occur from 1 P.M. to 9 P.M.; whilst we find that for half that period, or from 1 P.M. to 5 P.M., the Declination-disturbances are characterised by a very low proportion of easterly disturbances, and for the other half of the period, or from 6 P.M. to 9 P.M., by a very high proportion of easterly disturbances; and, without multiplying instances of dissimilarity, it may be remarked generally, that the more the six classes of disturbance are examined and compared with each other, the less reason does there appear to conclude that there is any uniform interaccompaniment of the variations of different elements.

As the instrument by which the variations of the Declination are observed is more simple in construction than those required for the variations of the Inclination and Total Force, and the disturbances of the Declination are therefore more easily observed and more generally known, a somewhat disproportionate consideration has been frequently given to them in the discussion of these phenomena, which it may be



desirable briefly to remark upon. Thus the knowledge of the magnetic disturbances having been chiefly drawn hitherto from those of the Declination, it has been very generally and very naturally imagined that the early hours of the night, or from 8 P.M. to 11 P.M., are those at which magnetic disturbances principally take place; that about 11 P.M., or a little after, they begin to subside, disappearing almost wholly in the daytime, and reappearing again possibly the following evening, at the same hour as on the preceding evening, in supposed analogy with certain peculiar atmospheric disturbances, which manifest a tendency to recur at the same hours on successive days. It is in this supposed analogy that the term of magnetic *storms* appears to have originated. An examination of the observations of the three elements at but a single station, as Toronto for example, teaches us that this view requires to be considerably modified. The disturbances of the Declination, which reach a maximum at 9 P.M., have indeed already subsided considerably at 11 P.M., but those of the Inclination show no abatement until about 2 A.M., whilst those of the Total Force, which are *much below* their average at 9 P.M., increase progressively to their maximum, which is only reached at 3 A.M., or nearly six hours after the maximum of the Declination disturbances has taken place. In like manner the hours of the afternoon, in which the Declination is but little disturbed, and which have been supposed in consequence to be hours in which an intermission of disturbance takes place, are seen by the table to be precisely those hours at which the disturbances which increase the Total Force have their principal development, being then in the proportion of nearly ten to one when compared with the homonymous hours after midnight. When these remarkable phenomena are more fully studied, the aspect they present is that of a disturbance continued frequently through several successive days, changing from one element to another, and affecting each at different hours and in different modes, in conformity with laws the average operation of which it has been the object of this investigation to ascertain; and wearing the appearance consequently, when only a single element is regarded, of a limitation to those hours when that element in particular is affected, but which appearance ceases when the phenomena are more generally apprehended.

It was the supposed analogy between magnetical and atmospherical disturbances which led, in the commencement of the British colonial observatories, to the *simultaneous* observation and record of these two great and, as we have now reason to believe, distinct branches of natural phenomena; and as the inquiry advances we are continually becoming acquainted with additional circumstances to strengthen the persuasion, that the causes of these occasional and previously supposed "irregular" manifestations of disturbing magnetical influence are to be sought in more distant sources than in variations of the meteorological phenomena.

There is another misapprehension in regard to the nature of the occasional disturbances, which has followed very naturally from the limitation of the view to the disturbances of a single element. An inference has sometimes been drawn in favour of a *local origin* of a particular disturbance (in contradistinction to the general fact of

their simultaneous occurrence at extremely distant parts of the globe), from the circumstance that though the disturbance was manifested by the Declination at one station, no indication of it was shown by the contemporaneous observations of the Declination at another and a distant station. Now, simultaneity at stations separated by considerable intervals of longitude implies a difference in the *solar* time; and the observations at Toronto show that a difference in the solar time may determine the question whether a disturbance, which may nevertheless be common to both stations, may or may not be traceable by simultaneous observations of a single element only. Towards the attainment of a just conclusion, therefore, in regard to a possible local origin, it is indispensable that a more extensive generalization should be made, and that contemporaneous affections of the *three* elements should be brought into the comparison. Nor can this condition of the inquiry be dispensed with even in comparing the phenomena at stations under the same meridian, but separated by large intervals of latitude, unless it be first shown that the same law of solar hours prevails at both stations in regard to the occurrence of the disturbances of each particular element. It need scarcely be said that the general simultaneity of the disturbances has a very important bearing upon their theory, inasmuch as it militates decidedly against the supposition of their originating in atmospherical peculiarities, and tends to assign them, with far greater probability, to a cosmical source. That some disturbances may have a local origin is undoubtedly *possible*, but no such case has yet, I believe, been established on adequate evidence.

For the purpose of viewing in its simplest form, and expressed in numerical value, the influence which, on a daily average, the larger disturbances exercise on the Declination, Inclination, and Total Force, we must revert to the aggregate values in the five years which supplied the ratios of disturbance at the different hours in each of the six classes of phenomena contained in Table LVI. From these values we obtain readily and immediately for each hour the excess in the aggregate amount of easterly over westerly, or of westerly over easterly, deflection, and of disturbances which increase or decrease the Inclination or the Total Force over those which respectively decrease or increase those elements. Hence we can easily form a table containing, for each of the elements at every hour, the numerical *excess* in the aggregate values of whichever kind of disturbance predominates at that hour; and dividing the excess by 1550, which is the number of days of observation in the five years, we have the mean effect corresponding to the larger disturbances of each of the elements at the different hours, or the average diurnal variation of each element due to the larger disturbances. This is shown in the following table, illustrated by Fig. 3. pl. 1., in which the diurnal variations of Declination and Inclination are expressed in decimals of a minute of arc, and that of the Total Force in parts of the Total Force at Toronto, which in absolute value and employing British units may be taken with sufficient approximation at 13.9.

TABLE LVII.

Toronto Astronomical Time.	Mean Diurnal Variation occasioned by the larger Disturbances.			Toronto Civil Time.
	Declination,	Inclination,	Total Force,	
11.			Parts of the Total Force.	
18	0°29 W.	+0°10	-000092	6 a.m.
19	0°41 W.	+0°18	-000092	7 a.m.
20	0°52 W.	+0°16	-000047	8 a.m.
21	0°46 W.	+0°13	-000032	9 a.m.
22	0°30 W.	+0°10	-000008	10 a.m.
23	0°11 W.	+0°09	+000007	11 a.m.
0	0°11 W.	+0°09	+000015	Noon.
1	0°04 W.	+0°09	+000027	1 p.m.
2	0°09 W.	+0°05	+000042	2 p.m.
3	0°08 W.	+0°07	+000051	3 p.m.
4	0°09 W.	+0°05	+000068	4 p.m.
5	0°01 W.	+0°08	+000073	5 p.m.
6	0°18 E.	+0°14	+000058	6 p.m.
7	0°34 E.	+0°14	+000062	7 p.m.
8	0°52 E.	+0°16	+000047	8 p.m.
9	0°87 E.	+0°16	+000016	9 p.m.
10	0°61 E.	+0°15	-000022	10 p.m.
11	0°53 E.	+0°16	-000017	11 p.m.
12	0°33 E.	+0°14	-000098	Midnight.
13	0°26 E.	+0°18	-000125	1 a.m.
14	0°17 E.	+0°19	-000132	2 a.m.
15	0°16 E.	+0°14	-000138	3 a.m.
16	0°15 E.	+0°12	-000123	4 a.m.
17	0°02 W.	+0°10	-000109	5 a.m.

From this table we find that the range of the diurnal variation of the Declination representing the influence of the larger disturbances is from 0°52 W. at 8 A.M. to 0°87 E. at 9 P.M. (or the whole range has an extent of 1°39); that of the Inclination, from a minimum increase of 0°05 at 2 P.M. to a maximum increase of 0°19 at 2 A.M. (or a total extent of 0°14); and that of the Total Force, from a maximum decrease of 000138 at 3 A.M. to a maximum increase of 000073 at 5 P.M. (or a total extent of range of 000211 parts of the Total Force at Toronto).

As the larger disturbances of each element which have been separated by the processes and subjected to the analysis described in this communication, can by no means be supposed to include the whole of the disturbances of the class to which they belong, we can only regard the extent of the diurnal variation as stated above to be in each case a minimum limit, which would be certainly somewhat exceeded if by any mode of proceeding we could succeed in separating the minor effects of the same causes; but we have no reason to suppose that the epochs of maxima and minima or the laws of intermediate progression would sustain any material alteration thereby.

As the aggregate values of the disturbances are taken from the five years which include a complete quinquennial or semi-decennial period, the *mean* diurnal variation

deduced from them must be considered as also subject to a small decennial variation, analogous to that which has been found to exist in the ordinary solar-diurnal variation. And as the sums of the variation-values at the different hours, taken with their proper signs, in no case equal zero, but have a sensible magnitude in each element, the absolute values of the three elements must also be affected with a very small cyclical variation due to the disturbances, of which the period will also be decennial.

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#### LUNAR-DIURNAL VARIATION.

The observations employed in the investigation on which we now enter are the six years of hourly observations of the Declination from July 1st, 1842, to June 30th, 1848, and the five years of hourly observations of the Horizontal and Vertical Forces commencing July 1st, 1843, and ending June 30th, 1848, but having in the first year of the Horizontal and Vertical Forces the months of October, November, December 1842, January and February 1843, substituted for the same months in the subsequent year, during which the observations of the Vertical Force were suspended.

The larger disturbances of each element having been marked for omission, and the hourly normals (excluding the observations so marked) computed as already described, the retained observations were then characterised in reference to their lunar relation by small figures signifying the lunar hour to which each observation most nearly corresponded. For this purpose the time of the moon's meridian passage at Greenwich was taken from the Nautical Almanac, and corrected for the difference of longitude, so as to give the time of the moon's passage of the astronomical meridian at Toronto in the mean solar time of the station. The difference of time corresponding to the difference between the meridians of Toronto and Göttingen was then applied, so as to give the mean *Göttingen* time of the moon's passage of the astronomical meridian at Toronto. The observation at the Göttingen hour nearest to the time thus computed was then marked with 0<sup>h</sup>, signifying that it was the nearest observation to the moon's upper culmination, and from which its distance could not exceed half an hour. The time of the moon's inferior passage was then computed in a similar manner, and the observation at the Göttingen hour nearest to it was marked 12<sup>h</sup>. The intermediate hours received corresponding markings, except that when thirteen solar hours, and consequently thirteen observations, were comprised within twelve lunar hours, that observation was omitted which fell most nearly equidistant between the epochs of two exact lunar hours. The monthly tables were thus marked for the lunar hours before they were returned from myself to the office, and were considered to be prepared for re-arrangement in tables conforming to lunar time; but instead of the observations themselves, the *differences* at each hour between the scale readings observed and the normals at the same hour (Tables X., XXV., and

LII.) were entered in the lunar tables, by which process the diurnal and other variations depending on the period of the year and the hour of the solar day were, in great part at least, eliminated. The differences were marked with a + or - sign according as the scale reading at the time of observation was greater or less than the normal, the entries having a + sign implying in the case of the Declination a westerly deflection of the north end of the magnet, and those having a - sign implying the converse.

The means were then taken in every month, at every lunar hour, the signs being regarded; the monthly means were then collected into yearly means; and finally, the means at each lunar hour in the six years of observation were collected as shown in the subjoined table, in which the entries are expressed in scale divisions, one scale division equalling 0'.721 of arc.

TABLE LVIII.

Lunar Hours.	Year ending June '90,						Means.	Lunar Hours.
	1843.	1844.	1845.	1846.	1847.	1848.		
0	Sc. Div. -0'20	Sc. Div. -0'42	Sc. Div. -0'45	Sc. Div. -0'40	Sc. Div. -0'46	Sc. Div. -0'37	Sc. Div. -0'38	0
1	-0'11	-0'31	-0'18	-0'37	-0'64	-0'29	-0'32	1
2	-0'08	-0'28	+0'01	-0'28	-0'39	-0'31	-0'22	2
3	-0'09	-0'08	-0'07	0'00	-0'36	-0'13	-0'12	3
4	+0'26	+0'09	+0'31	+0'08	+0'13	+0'28	+0'19	4
5	+0'39	+0'09	+0'42	+0'52	+0'20	+0'45	+0'35	5
6	+0'66	+0'40	+0'23	+0'77	+0'15	+0'48	+0'45	6
7	+0'51	+0'29	+0'47	+0'56	+0'31	+0'29	+0'40	7
8	+0'17	+0'26	+0'08	+0'50	+0'09	+0'10	+0'20	8
9	-0'14	+0'21	-0'31	+0'31	-0'23	+0'35	+0'03	9
10	-0'36	-0'24	-0'57	-0'22	-0'40	+0'01	-0'29	10
11	-0'51	-0'33	-0'66	-0'54	-0'24	-0'49	-0'46	11
12	-0'59	-0'48	-0'51	-0'51	-0'52	-0'22	-0'17	12
13	-0'37	-0'27	-0'45	-0'34	-0'29	-0'44	-0'36	13
14	-0'17	-0'31	-0'24	-0'32	+0'07	-0'15	-0'19	14
15	+0'07	-0'14	+0'01	-0'12	+0'52	-0'10	+0'04	15
16	+0'12	+0'22	+0'31	+0'14	+0'43	+0'20	+0'21	16
17	+0'37	+0'45	+0'51	+0'16	+0'55	+0'49	+0'42	17
18	+0'43	+0'74	+0'65	+0'39	+0'47	+0'58	+0'54	18
19	+0'26	+0'25	+0'52	+0'21	+0'55	+0'39	+0'36	19
20	+0'29	+0'15	+0'35	+0'20	+0'22	+0'05	+0'21	20
21	+0'08	+0'15	+0'10	-0'15	-0'21	-0'30	-0'06	21
22	-0'26	-0'05	-0'04	-0'23	-0'42	-0'42	-0'24	22
23	-0'29	-0'37	-0'33	-0'25	-0'31	-0'34	-0'32	23

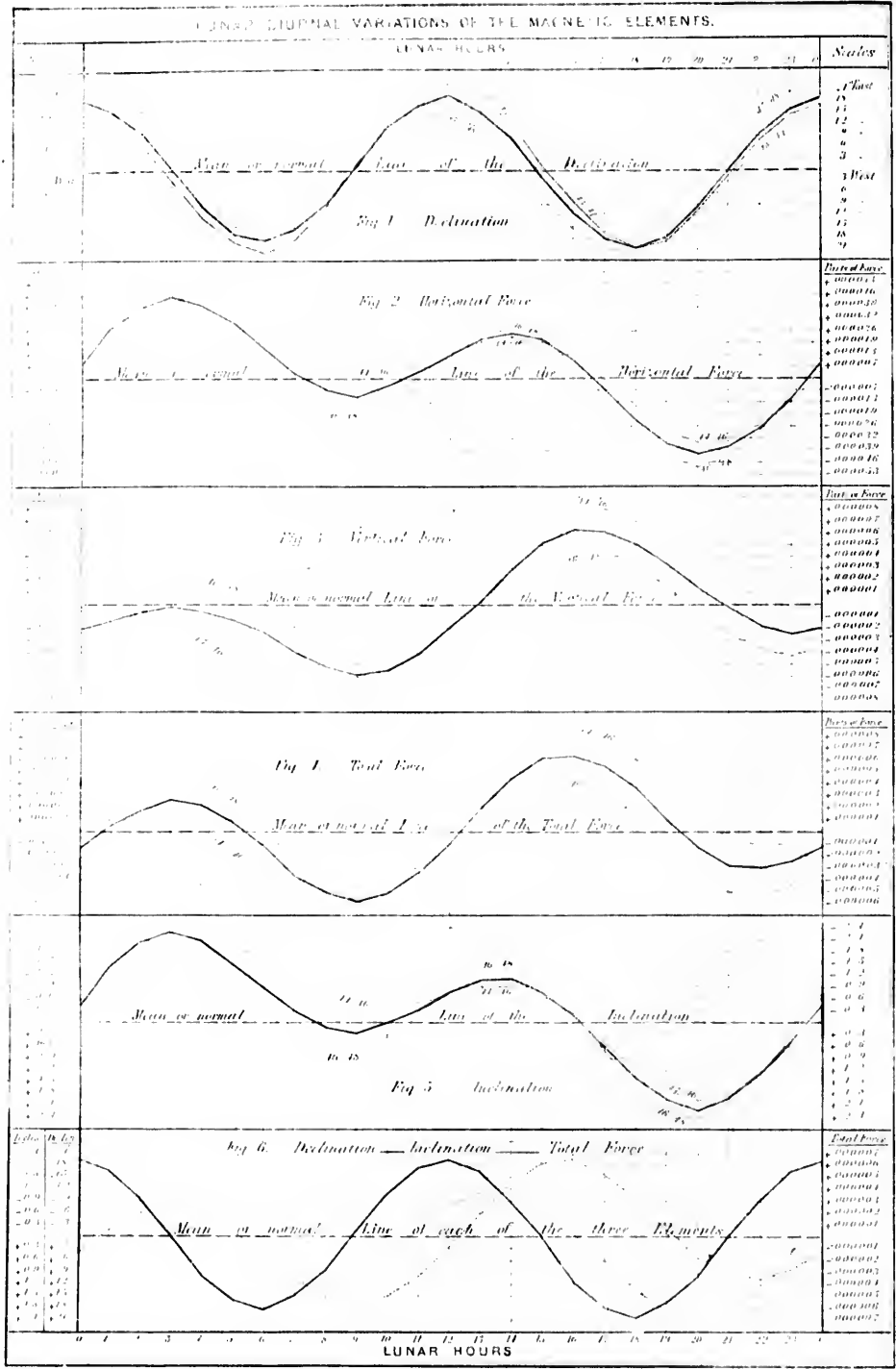
Representing the mean of the six years by the usual formula of sines and cosines, we have the coefficients of the several terms as follows, expressed in seconds of arc,  $\alpha$  being counted in hours (multiplied by 15°) from the time of the moon's upper culmination.



5 a.	cos 6 a.
=	$\Lambda_6 =$
48	" -0'22
1 a.	sin 12 a.
=	$\Lambda_{12} =$
28	" -0'29

s

f





LUNAR-DIURNAL VARIATION: HORIZONTAL FORCE.

TABLE LXI.

Lunar Hours.	Deflections.	Lunar Hours.	Deflections.	Lunar Hours.	Deflections.	Lunar Hours.	Deflections.
22	9°29 to the East.	4	9°19 to the West.	10	10°67 to the East.	16	10°77 to the West.
23	15°92 "	5	15°89 "	11	17°30 "	17	17°78 "
0	18°95 "	6	18°14 "	12	19°38 "	18	20°21 "
1	16°46 "	7	15°34 "	13	16°31 "	19	17°43 "
2	9°54 "	8	8°20 "	14	8°86 "	20	10°19 "
3	0°14 "	9	0°42 to the East.	15	1°04 to the West.	21	0°42 "

Comparing these values with the actual deflections, we find the probable error at each observation hour  $\pm 1''\cdot37$ .

In Plate II., Fig. 1., the darker line represents the deflections in Table LXI. constituting the lunar-diurnal variation, the dotted line showing the mean or normal position of the magnet. The variation thus represented is that derived from the mean of the six years; and for the purpose of showing the accordance of the results when the whole period of six years is divided into three portions, each consisting of two years, —viz., July 1842 to June 1844, July 1844 to June 1846, and July 1846 to June 1848, —the corresponding curves have been computed by the subjoined formulae, obtained as already described, and are represented by the fainter lines. The formulae are—

$$\text{July 1842 to June 1844, } \Delta_x = + 0''\cdot41 - 2''\cdot09 \sin(\alpha + 291^\circ) - 18''\cdot1 \sin(2\alpha + 87^\circ\cdot7)$$

$$\text{July 1844 to June 1846, } \Delta_x = + 0''\cdot30 + 3''\cdot04 \sin(\alpha + 78^\circ\cdot7) + 20''\cdot6 \sin(2\alpha + 270^\circ\cdot1)$$

$$\text{July 1846 to June 1848, } \Delta_x = - 0''\cdot58 - 5''\cdot23 \sin(\alpha + 53^\circ\cdot5) + 18''\cdot9 \sin(2\alpha + 276^\circ\cdot1)$$

The number of hourly observations of the Declination made in the six years amounted to 42,888; of these, 2,345 were disturbed to an amount which equalled or exceeded 5'0 of arc from the normal at the same hour, and were consequently excluded; leaving 40,543 as the number of observations from which the results of the lunar-diurnal variation have been derived.

*Horizontal Force.*—Table LXII. exhibits, in columns 2 to 6, the mean hourly variation of the Horizontal Force at the different lunar hours in each of the five years ending June 30, and in column 7 the mean of the five years. The lunar influence at the several lunar hours is shown in decimals of a scale division, one such division being approximately 000087 parts of the whole Horizontal Force at Toronto. The sign + implies that the force is increased, and — that it is decreased, by the lunar influence.

TABLE LXII.

Lunar Hours.	In the Year ending June 30,					Mean of the Five Years.	Lunar Hours.
	1844.	1845.	1846.	1847.	1848.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0	Sc. Div. +0'44	Sc. Div. -0'05	Sc. Div. +0'10	Sc. Div. +0'70	Sc. Div. -0'07	Sc. Div. +0'22	0
1	+0'48	+0'01	+0'09	+0'70	+0'68	+0'39	1
2	+0'68	+0'59	+0'11	+0'29	+0'42	+0'42	2
3	+0'42	+0'48	+0'71	+0'50	+0'08	+0'44	3
4	+0'58	+0'28	+0'22	+0'09	+0'19	+0'27	4
5	+0'16	+0'68	+0'21	+0'43	+0'74	+0'44	5
6	-0'23	+1'11	-0'03	+0'09	+0'43	+0'27	6
7	-0'13	+0'72	-0'20	-0'25	+0'21	+0'07	7
8	-0'16	+0'59	-0'31	-0'24	-0'19	-0'06	8
9	-0'12	+0'28	-0'23	-0'79	+0'24	-0'12	9
10	-0'43	+0'20	-0'10	-0'62	+0'23	-0'14	10
11	-0'02	+0'32	+0'36	+0'39	-0'22	+0'17	11
12	-0'28	+0'37	+0'15	-0'05	-0'31	-0'02	12
13	+0'11	+0'64	+0'11	+0'23	+0'47	+0'31	13
14	+0'06	+0'84	+0'18	-0'09	+0'40	+0'28	14
15	+0'06	+0'04	+0'23	-0'06	+0'73	+0'20	15
16	0'00	-0'01	+0'13	+0'32	+0'28	+0'14	16
17	-0'17	+0'48	-0'47	0'00	+0'33	+0'03	17
18	-0'08	-0'19	-0'13	-0'24	-0'47	-0'22	18
19	-0'21	-0'13	-0'33	-0'54	-0'80	-0'40	19
20	-0'19	-0'70	-0'11	-0'55	-1'33	-0'58	20
21	-0'19	-0'82	-0'31	-0'09	-1'07	-0'50	21
22	-0'28	-0'44	-0'22	+0'09	-0'65	-0'30	22
23	-0'08	-0'46	-0'15	+0'34	-0'18	-0'11	23

We may represent the values in column 7 of Table LXII. (or the variation of the Horizontal Force at the several lunar hours on the average of the five years of observation) by the first terms of the usual formulæ for periodical functions; viz.,

$$\Delta_x = A_0 + A_1 \cos a + B_1 \sin a + A_2 \cos 2a + B_2 \sin 2a;$$

and by substituting in this formula the numerical values of the coefficients obtained from the numbers in column 7, it becomes

$$\Delta_x = +.05 - .024 \cos a + .214 \sin a + .0775 \cos 2a + .323 \sin 2a,$$

or its more convenient equivalent,

$$\Delta_x = +.05 + .215 \sin (a + 353^\circ.6) + .3324 \sin (2a + 13^\circ.5),$$

the coefficients being decimals of a scale division, and  $a$  reckoned in hours (multiplied by  $15^\circ$ ) from the time of the moon's superior culmination. By this formula we obtain the curve which is shown by the stronger line in Plate II., Fig. 2.; and for the purpose of showing the degree of confidence to which this curve is entitled as an approximate representation of the variation produced in the Horizontal Force by the moon in the course of a lunar day, the variation in the different years in columns 2 to 6 of Table LXII. have been so combined as to form two separate means, one representing the columns headed 1844, 1845, and 1846, and a second representing

the columns headed 1846, 1847, and 1848,—the years 1844 and 1845 having double weight assigned to them in the first mean, and those in the columns headed 1847 and 1848 double weight in the second mean. The formulæ representing these separate means are—

For 1844 to 1846,  $\Delta_x = +.088 + .243 \sin(a + 347^\circ.6) + .277 \sin(2a + 4^\circ.6)$

For 1846 to 1848,  $\Delta_x = +.013 + .192 \sin(a + 355^\circ.0) + .395 \sin(2a + 19^\circ.2)$

The curves respectively computed by these formulæ are shown by the fainter lines in Fig. 2., in which the stronger line has been already noticed as being derived from the mean of the five years.

The number of hourly observations of the Bifilar Magnetometer employed in this investigation is 34,303.

*Vertical Force.*—Table LXIII. exhibits, in columns 2 to 6, the mean hourly variation of the Vertical Force at the different lunar hours in each of the five years ending June 30, and in column 7 the mean variation in the five years. The lunar influence at the several lunar hours is expressed in decimals of a scale division, one scale division being approximately .000065 parts of the whole Vertical Force at Toronto. The sign + implies an increase, and — a decrease, of the force from the lunar influence.

TABLE LXIII.

Lunar Hours.	In the Year ending June 30.					Mean of the Five Years.	Lunar Hours.
	1844.	1845.	1846.	1847.	1848.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0	Sc. Div. +0'08	Sc. Div. +0'02	Sc. Div. -0'02	Sc. Div. -0'03	Sc. Div. +0'03	Sc. Div. +0'02	0
1	+0'09	-0'03	+0'06	0'00	+0'02	+0'03	1
2	+0'02	-0'07	-0'16	-0'09	-0'18	-0'10	2
3	-0'11	0'00	-0'07	+0'18	-0'06	-0'01	3
4	-0'09	-0'01	-0'01	+0'13	+0'08	+0'02	4
5	+0'01	-0'02	-0'09	+0'07	+0'02	0'00	5
6	-0'12	-0'12	+0'09	+0'01	-0'05	-0'04	6
7	-0'06	-0'24	+0'08	-0'18	-0'02	-0'08	7
8	+0'03	-0'22	+0'03	-0'15	-0'17	-0'10	8
9	-0'04	-0'10	-0'10	+0'02	-0'07	-0'06	9
10	-0'13	-0'10	-0'10	+0'08	-0'11	-0'07	10
11	-0'14	+0'03	-0'03	+0'02	-0'14	-0'05	11
12	-0'08	+0'12	-0'10	+0'01	-0'20	-0'05	12
13	+0'14	+0'03	+0'08	+0'10	-0'16	+0'04	13
14	+0'03	+0'10	+0'04	+0'03	-0'09	+0'02	14
15	+0'08	+0'15	+0'06	+0'02	+0'04	+0'07	15
16	+0'11	+0'18	+0'08	+0'12	+0'06	+0'11	16
17	+0'17	+0'09	+0'04	+0'04	+0'12	+0'09	17
18	+0'19	+0'09	+0'18	-0'03	+0'02	+0'09	18
19	+0'11	+0'05	0'00	0'00	+0'12	+0'06	19
20	+0'14	+0'01	+0'01	-0'14	+0'08	+0'02	20
21	+0'11	-0'07	-0'17	-0'13	+0'05	-0'04	21
22	+0'08	+0'04	-0'21	-0'07	+0'07	-0'02	22
23	+0'11	+0'04	-0'18	-0'13	-0'03	-0'06	23

The curves obtained from the values comprised in this table are represented to the eye in Plate II., Fig. 3., the fainter lines corresponding to the variations in the separate periods, 1844 to 1846, and 1846 to 1848, and the stronger line to the mean of the whole period of five years. The formulæ by which these curves have been computed are as follow:—

$$1844 \text{ to } 1846, \Delta_z = + \cdot 006 - \cdot 092 \sin (a + 0^\circ \cdot 5) + \cdot 036 \sin (2a + 345^\circ \cdot 1)$$

$$1846 \text{ to } 1848, \Delta_z = - \cdot 014 - \cdot 028 \sin (a + 355^\circ \cdot 5) + \cdot 058 \sin (2a + 316^\circ \cdot 7)$$

$$1844 \text{ to } 1848, \Delta_z = + \cdot 005 - \cdot 058 \sin (a + 2^\circ \cdot 0) + \cdot 048 \sin (2a + 330^\circ \cdot 0)$$

The coefficients are decimals of a scale division, and  $a$  is reckoned in hours (multiplied by  $15^\circ$ ) from the time of the moon's superior culmination. The number of hourly observations of the Vertical Force Magnetometer employed in this investigation is 31,773.

*Inclination and Total Force.*—The variations of the Inclination and Total Force in a lunar day are derived from those of the horizontal and vertical components of the force by the formulæ—

$$\Delta \delta = \sin \delta \cos \delta \left( \frac{\Delta Y}{Y} - \frac{\Delta X}{X} \right);$$

$$\frac{\Delta \ddagger}{\ddagger} = \cos^2 \delta \frac{\Delta X}{X} + \sin^2 \delta \frac{\Delta Y}{Y};$$

in which  $\delta$  is the inclination,  $\ddagger$  the total force, X its horizontal, and Y its vertical component. They are shown for the whole period of the five years in Table LXIV., computed from the values of the Horizontal and Vertical Forces in columns 7 of Tables LXII. and LXIII. The variation of the Inclination is expressed in seconds of arc, the sign + signifying an increase of the dip of the north end of the magnet; and that of the Total Force in parts of the Total Force at Toronto, of which the approximate *absolute value* is 13.9 in British units.

TABLE LXIV.

Lunar Hours.	Lunar-diurnal Variation		Lunar Hours.	Lunar-diurnal Variation		Lunar Hours.	Lunar-diurnal Variation	
	of the Inclination.	of the Total Force.		of the Inclination.	of the Total Force.		of the Inclination.	of the Total Force.
0	-0.56	Parts of the Force -0.000013	8	+0.05	-0.000051	16	-0.22	+0.000063
1	-1.41	+0.000004	9	+0.17	-0.000058	17	+0.57	+0.000053
2	-2.07	+0.000019	10	0.09	-0.000050	18	+1.31	+0.000033
3	-2.25	+0.000026	11	-0.32	-0.000031	19	+1.92	+0.000006
4	-2.05	+0.000021	12	-0.75	-0.000010	20	+2.14	-0.000020
5	-1.61	+0.000008	13	-1.07	+0.000021	21	+1.93	-0.000031
6	-0.97	-0.000012	14	-1.08	+0.000014	22	+1.33	-0.000055
7	-0.33	-0.000031	15	-0.76	+0.000060	23	+0.42	-0.000026

These variations are represented to the eye by the stronger lines in Figs. 4. and 5. of Plate II.; in which also the fainter lines show the variations derived respectively from the half periods constituted as previously described. In Fig. 6., of Plate II. are collected in one view the lunar-diurnal variations of the Declination, Inclination, and Total Force, as they are separately represented in other figures of the same plate.

*General Conclusions.*—The three magnetic elements concur in showing that the moon exercises a sensible magnetic influence at the surface of the earth, producing in every lunar day a variation in each of the three elements, which is distinctly appreciable by the instruments employed in the observatories established to carry out the system of observation recommended by the Royal Society, when due care has been taken in conducting the observations, and suitable methods are adopted for elaborating the results.

The lunar-diurnal variation consists in a double progression in each lunar day in each of the three elements: the Declination has two easterly and two westerly maxima, and the Inclination and Total Force each two maxima and two minima in each interval between two successive passages of the moon over the astronomical meridian; the variation passing in every case four times through zero in the course of the lunar day. The easterly maxima of the horizontal deflection of the north end of the magnet synchronise with the moon's superior and inferior passages of the meridian, the westerly maxima with the lunar hours of 6 and 18. The maxima of the increased magnetic force due to the moon's action occur about the lunar hours of 3 and 16, and the minima about the hours of 9 and 20. The maxima of the Inclination, *i.e.* of the dip of the north end of the magnet, occur about the lunar hours of 3 and 14, and the minima about 9 and 20. The extent of the variation in the lunar day, or the range between the extremes that are widest apart, is in the Declination  $38''\cdot33$ , in the Inclination  $4''\cdot4$ , and in the Total Force  $\cdot000012$  parts of the whole terrestrial magnetic force at Toronto. These are the values derived from the whole period of observation, *i.e.* from six years of the Declination, and from five years of the Inclination and Total Force. When the whole period is subdivided into two half-periods, the hours of maxima and minima and the extent of the range accord with the results of the whole period in each of the three elements, with slight and wholly insignificant exceptions. The reality of the variations is thus attested no less by the accordance of the results when the whole period during which the phenomena were observed is subdivided into separate and independent portions, than by the systematic character which the variation is seen to possess, when the strictly independent results at the several lunar hours are brought together and exhibited continuously.

As it happens that in the Declination the variation resulting from the moon's action is greater, relatively to the instrumental means for measuring it, than either in the Inclination or in the Total Force, it is reasonable to conclude that we have a better

opportunity of judging of the particular nature and character of the moon's magnetic influence by studying the effects produced on the Declination than by studying those produced on either of the other elements.

Referring to Table LIX., p. lxxx, which exhibits the coefficients of all the twelve terms in the formula of sines and cosines by which the results of observation are strictly represented, we perceive that the coefficient of the cosine of twice the hour angle is not only the one of greatest amount, but is, in fact, the only one which we can with confidence regard as possessing a substantial value. All the other coefficients are, without exception, not only extremely small in comparison with the one above noticed, but are so small that they may well be supposed to represent the small deviations from a natural law ascribable to errors which cannot wholly be extinguished in averages derived from not more than six years of observation. On the other hand, the coefficient in the second term has a value far beyond any explanation resting on the supposition of errors of observation. The probable error of any single hour is  $1''\cdot37$ , whilst the range of the variation is not less than  $38''$ . Whilst, therefore, the general result of this investigation is to establish conclusively the existence of a lunar-magnetic influence sensible at the surface of the earth, the lunar-diurnal variation which is thus manifested appears to be consistent with the hypothesis that the moon's magnetism may be, in great part at least, if not wholly, derived by induction from the magnetism of the earth.

It is further observable, that in the lunar-diurnal variation there is no appearance of the *decennial* period which constitutes so marked a feature in the solar-diurnal variations.

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#### SOLAR-DIURNAL VARIATION.

*Declination.*—In the first volume of the Toronto Observations, published in 1845, an inference was drawn from the examination of the observations in 1841 and 1842 printed in that volume, that the *double progression* which showed itself in the diurnal variation, (produced by a small westerly retrogression of the north end of the magnet occurring between the hours of 10 and 14), might be an effect of the superposition of two distinct diurnal variations, each proceeding from a distinct class of phenomena; one class being the regular solar-diurnal variation corresponding to the sun's daily (apparent) revolution round the earth; and the other class produced by causes, not indeed of daily, but of *occasional* occurrence, the diurnal variation being in the latter case the representative of the *mean* effect of the occasional causes: and it was suggested, that if by any process the whole effect of the occasional disturbances could be eliminated, it might be very possible that the residual variation, or that portion which might be regarded as more strictly deserving the name of "diurnal variation," might prove to be "a single progression with but one maximum and one minimum in the 24 hours." It was at the same time further suggested, that though it might be

difficult, and perhaps impossible, to eliminate from the observations the whole effect of the disturbances referred to, it might be very possible, by a partial separation of those of largest amount, to examine whether their influence on the diurnal variation was or was not of a systematic character, and such as might produce the supposed effects.

The Toronto observations from 1843 to 1848 have since been received and printed, and have been treated according to the suggestion above noticed. The result has been to establish the fact, that the occasional and previously called "irregular" disturbances are phenomena subject to periodical laws; and that amongst these there is one which regulates their occurrence in the diurnal period, causing them to constitute in their *mean* effect a diurnal variation wholly distinct from the regular *daily* solar-diurnal variation, and having different hours of maxima and minima. (*Phil. Trans.* 1851, Art. V.; 1852, Art. VIII.; 1856, Art. XV.; and pp. lxxvi and lxxvii of this volume.)

The disturbed observations which have been separated from the great body of the observations for the purpose of this investigation are all those which differ from the normal position of the magnet, at the same hour and in the same month, by a quantity equalling or exceeding  $5^{\circ}0$  of *arc*. These have sufficed to establish the systematic characters and distinctive features of the diurnal variation which the disturbances occasion, but we are sure that they do not give its *full numerical amount*; for it cannot be doubted that there must be minor disturbances of the same class,—minor effects proceeding from the same causes,—which remain in the body of the observations when those of  $5^{\circ}0$  and upwards have been removed; and which must still continue to exercise an influence similar in kind, and possibly (as being more numerous) not less in degree, on the residual diurnal curve, modifying the pure result which would be obtained if the whole influence of the disturbances could by any process be separated. The question, then, which now remains to be considered is, whether, and with what degree of probability, we may infer, by means of a comparison of the diurnal variation with and without the disturbances of  $5^{\circ}0$  and upwards, that if their whole influence were eliminated the residual diurnal variation would show itself as a single instead of a double progression.

This question is of some theoretical importance; for since the publication of the first volume of this work, in 1845, the physical explanation of the diurnal variation has occupied the attention of eminent physicists, two of whom in particular, Faraday and Secchi, have propounded physical theories, which, however dissimilar they may be in other respects, concur in regarding the diurnal variation derived from the whole of the observations including the disturbances, as phenomena of one and the same class, and the double progression as an integral part of the same, and a necessary consequence of the physical theory adopted for their explanation. An additional importance is therefore given to the inquiry whether, after the deduction of that portion of the diurnal variation which has now been ascertained to proceed from a distinct class of

phenomena, not of daily but of occasional occurrence, the residual variation, or that due to the regular daily course of the sun round the earth, may not be regarded with greater probability as a "single progression with but one maximum and one minimum," rather than as a "double progression with two maxima and two minima."

In column 2 of the subjoined table (Table LXV.) is shown the mean diurnal variation derived from the whole of the observations, including the disturbances; in column 3 the mean diurnal variation derived from the disturbances which equal or exceed 5'0 (from Table LI., p. lxi); in column 4 we have the residual diurnal variation when the values in column 3 are deducted from those in column 2; and in column 5 we have the diurnal variation such as it would be found if we permitted ourselves to suppose that by abstracting the disturbances equalling or exceeding 5'0 we had eliminated *half* the influence of the disturbances of the class to which they belong.

TABLE LXV.

Toronto Astronomical Time.	Diurnal Variation, as derived from				Toronto Astronomical Time.
	the whole of the Observations.	the larger Disturbances.	the Values in Column 2 — the Values in Column 3.	the Values in Column 2 — twice the Values in Column 3.	
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)
ii.	/	/	/	/	ii.
12	0'96 E.	0'33 E.	0'63 E.	0'30 E.	12
13	0'89 E.	0'26 E.	0'54 E.	0'28 E.	13
14	0'69 E.	0'17 E.	0'52 E.	0'35 E.	14
15	0'87 E.	0'16 E.	0'71 E.	0'55 E.	15
16	1'27 E.	0'15 E.	1'12 E.	0'97 E.	16
17	1'91 E.	0'02 W.	1'93 E.	1'95 E.	17
18	2'69 E.	0'29 W.	2'98 E.	3'27 E.	18
19	3'58 E.	0'41 W.	3'99 E.	4'40 E.	19
20	3'92 E.	0'52 W.	4'44 E.	4'96 E.	20
21	3'17 E.	0'46 W.	3'63 E.	4'09 E.	21
22	0'91 E.	0'30 W.	1'24 E.	1'54 E.	22
23	1'80 W.	0'11 W.	1'69 W.	1'58 W.	23
0	4'13 W.	0'11 W.	4'02 W.	3'91 W.	0
1	5'10 W.	0'03 W.	5'07 W.	5'04 W.	1
2	4'96 W.	0'09 W.	4'87 W.	4'78 W.	2
3	3'91 W.	0'08 W.	3'83 W.	3'75 W.	3
4	2'57 W.	0'09 W.	2'48 W.	2'39 W.	4
5	1'33 W.	0'04 W.	1'29 W.	1'25 W.	5
6	0'30 W.	0'18 E.	0'48 W.	0'66 W.	6
7	0'22 E.	0'34 E.	0'12 W.	0'46 W.	7
8	0'70 E.	0'52 E.	0'18 E.	0'34 W.	8
9	1'39 E.	0'87 E.	0'52 E.	0'35 W.	9
10	1'31 E.	0'61 E.	0'70 E.	0'09 E.	10
11	1'24 E.	0'53 E.	0'71 E.	0'18 E.	11

From this table we perceive, 1st, that when the diurnal variation is derived from the whole body of the observations including the disturbances as in column 2, the march of the north end of the magnet towards the east, which is otherwise continuous from



the extreme westerly direction between 1 and 2 P.M. to the extreme easterly direction between 7 and 8 the following morning, is interrupted by a small westerly retrogression between 9 P.M. and 4 A.M.; 2d, that when the *larger* disturbances, or those which equal or exceed 5'0 in amount, and produce as their *mean* effect the diurnal variation in column 3, are eliminated, the westerly retrogression previously noticed is reduced very considerably both in amount and continuance, as is seen in column 4; and 3d, that if we assume that, by abstracting the disturbances equalling or exceeding 5'0, we may have eliminated *half* of the whole influence of the causes to which the larger disturbances are due (which is certainly no unreasonable supposition), we have the residual diurnal variation as in column 5, in which the westerly retrogression is almost wholly obliterated, and the variation has become virtually a single progression, with but one maximum and one minimum.

Viewing, then, the residual variation after the elimination of the influence of the disturbances as the best approximation we can obtain towards a representation of the phenomena of the regular solar-diurnal variation, and regarding this representation as corresponding to a *mean* state of the phenomena, or to that which would belong to all the days in the year if the sun's path were always in the plane of the equator, we find the mean solar-diurnal variation at Toronto to be approximately as follows:—The chief variation takes place during the hours when the sun is above the horizon; the motion of the north end of the magnet towards the east, which during the hours of the night is extremely slow, quickens between 4 and 5 A.M., and continues at a nearly uniform rate, exceeding 1' an hour, from 5 A.M. to a few minutes before 8 A.M., when the easterly extreme is reached. The north end then returns rapidly towards the west, attaining the westerly extreme of its daily progress about 20 minutes past 1 P.M. This interval is the time of most rapid motion, the whole amplitude or extent of the diurnal variation, amounting to about 10' of arc, being passed through in about 5½ hours. The motion is most rapid between 10 and 11 A.M., when the change of direction in one hour is very nearly 4'0. After reaching the westerly extreme, at or about 1h. 20m., the north end returns again towards the east, at a nearly uniform rate a little exceeding 1'0 per hour, until near 6 P.M., at which time the night phase of the variation may be said to commence. This, apart from the disturbances, is a continuation of the easterly motion, but at a comparatively very slow rate, which, on the average of the 10 hours from 6 P.M. to 4 A.M., scarcely exceeds 0'16 per hour.

Table LXXVI. exhibits the solar-diurnal variation of the Declination in the different months of the year after the separation and omission of the larger disturbances. This table is similar in form to Table VII. in vol. II. (p. xv), but differs from it inasmuch as the latter is derived from *all* the observations, including the disturbances, and in this the disturbances are excluded. The sign + implies that the north end of the magnet is to the east, and — to the west, of the mean position in the month.

TABLE LXVI.

Months.	TORONTO ASTRONOMICAL HOURS.												
	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
January	-2 <sup>h</sup> 50	-3 <sup>h</sup> 34	-3 <sup>h</sup> 14	-2 <sup>h</sup> 41	-1 <sup>h</sup> 64	-0 <sup>h</sup> 92	-0 <sup>h</sup> 32	+0 <sup>h</sup> 06	+0 <sup>h</sup> 76	+1 <sup>h</sup> 02	+1 <sup>h</sup> 08	+0 <sup>h</sup> 66	
February	-2 <sup>h</sup> 42	-3 <sup>h</sup> 30	-3 <sup>h</sup> 26	-2 <sup>h</sup> 51	-1 <sup>h</sup> 66	-1 <sup>h</sup> 36	-0 <sup>h</sup> 84	-0 <sup>h</sup> 38	+0 <sup>h</sup> 32	+0 <sup>h</sup> 92	+0 <sup>h</sup> 88	+0 <sup>h</sup> 60	
March	-3 <sup>h</sup> 72	-5 <sup>h</sup> 22	-5 <sup>h</sup> 36	-4 <sup>h</sup> 78	-3 <sup>h</sup> 42	-2 <sup>h</sup> 18	-1 <sup>h</sup> 12	-0 <sup>h</sup> 55	-0 <sup>h</sup> 30	+0 <sup>h</sup> 22	+0 <sup>h</sup> 90	+1 <sup>h</sup> 02	
April	-4 <sup>h</sup> 51	-5 <sup>h</sup> 98	-5 <sup>h</sup> 81	-4 <sup>h</sup> 98	-3 <sup>h</sup> 30	-1 <sup>h</sup> 66	-0 <sup>h</sup> 80	-0 <sup>h</sup> 32	+0 <sup>h</sup> 44	+0 <sup>h</sup> 44	+0 <sup>h</sup> 82	+1 <sup>h</sup> 12	
May	-5 <sup>h</sup> 24	-6 <sup>h</sup> 28	-6 <sup>h</sup> 10	-4 <sup>h</sup> 81	-3 <sup>h</sup> 12	-1 <sup>h</sup> 26	-0 <sup>h</sup> 44	-0 <sup>h</sup> 22	-0 <sup>h</sup> 18	+0 <sup>h</sup> 16	+0 <sup>h</sup> 38	+0 <sup>h</sup> 50	
June	-4 <sup>h</sup> 72	-6 <sup>h</sup> 20	-6 <sup>h</sup> 26	-5 <sup>h</sup> 26	-3 <sup>h</sup> 76	-1 <sup>h</sup> 68	-0 <sup>h</sup> 62	-0 <sup>h</sup> 28	-0 <sup>h</sup> 42	-0 <sup>h</sup> 22	+0 <sup>h</sup> 04	+0 <sup>h</sup> 66	
July	-4 <sup>h</sup> 24	-5 <sup>h</sup> 86	-5 <sup>h</sup> 96	-5 <sup>h</sup> 12	-3 <sup>h</sup> 68	-1 <sup>h</sup> 86	-0 <sup>h</sup> 70	-0 <sup>h</sup> 36	-0 <sup>h</sup> 66	-0 <sup>h</sup> 16	+0 <sup>h</sup> 36	+0 <sup>h</sup> 58	
August	-6 <sup>h</sup> 00	-7 <sup>h</sup> 22	-6 <sup>h</sup> 52	-5 <sup>h</sup> 04	-2 <sup>h</sup> 74	-1 <sup>h</sup> 02	-0 <sup>h</sup> 18	-0 <sup>h</sup> 12	-0 <sup>h</sup> 10	+0 <sup>h</sup> 48	+0 <sup>h</sup> 46	+0 <sup>h</sup> 52	
September	-6 <sup>h</sup> 26	-6 <sup>h</sup> 38	-5 <sup>h</sup> 40	-3 <sup>h</sup> 36	-1 <sup>h</sup> 16	-0 <sup>h</sup> 42	+0 <sup>h</sup> 12	+0 <sup>h</sup> 06	+0 <sup>h</sup> 24	+0 <sup>h</sup> 64	+0 <sup>h</sup> 78	+0 <sup>h</sup> 06	
October	-3 <sup>h</sup> 72	-4 <sup>h</sup> 20	-3 <sup>h</sup> 94	-2 <sup>h</sup> 66	-1 <sup>h</sup> 80	-1 <sup>h</sup> 24	-0 <sup>h</sup> 70	-0 <sup>h</sup> 22	+0 <sup>h</sup> 24	+0 <sup>h</sup> 58	+0 <sup>h</sup> 48	+0 <sup>h</sup> 62	
November	-3 <sup>h</sup> 00	-3 <sup>h</sup> 80	-3 <sup>h</sup> 30	-2 <sup>h</sup> 52	-1 <sup>h</sup> 78	-1 <sup>h</sup> 10	-0 <sup>h</sup> 12	+0 <sup>h</sup> 64	+0 <sup>h</sup> 84	+0 <sup>h</sup> 96	+1 <sup>h</sup> 16	+1 <sup>h</sup> 16	
December	-1 <sup>h</sup> 94	-3 <sup>h</sup> 02	-3 <sup>h</sup> 36	-2 <sup>h</sup> 38	-1 <sup>h</sup> 70	-0 <sup>h</sup> 80	0 <sup>h</sup> 00	+0 <sup>h</sup> 36	+0 <sup>h</sup> 88	+1 <sup>h</sup> 24	+1 <sup>h</sup> 10	+1 <sup>h</sup> 02	
Semi-annual Means	April to Sept.	-5 <sup>h</sup> 17	-6 <sup>h</sup> 32	-6 <sup>h</sup> 01	-4 <sup>h</sup> 77	-2 <sup>h</sup> 96	-1 <sup>h</sup> 32	-0 <sup>h</sup> 44	-0 <sup>h</sup> 24	-0 <sup>h</sup> 10	+0 <sup>h</sup> 22	+0 <sup>h</sup> 47	+0 <sup>h</sup> 57
	Oct. to March	-2 <sup>h</sup> 88	-3 <sup>h</sup> 81	-3 <sup>h</sup> 73	-2 <sup>h</sup> 89	-2 <sup>h</sup> 00	-1 <sup>h</sup> 27	+0 <sup>h</sup> 52	+0 <sup>h</sup> 02	+0 <sup>h</sup> 46	+0 <sup>h</sup> 82	+0 <sup>h</sup> 93	+0 <sup>h</sup> 85
Annual Means		-4 <sup>h</sup> 02	-5 <sup>h</sup> 07	-4 <sup>h</sup> 87	-3 <sup>h</sup> 83	-2 <sup>h</sup> 48	-1 <sup>h</sup> 29	-0 <sup>h</sup> 48	-0 <sup>h</sup> 12	+0 <sup>h</sup> 18	+0 <sup>h</sup> 52	+0 <sup>h</sup> 70	+0 <sup>h</sup> 71

(continue d)

Months	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	
January	+0 <sup>h</sup> 44	+0 <sup>h</sup> 12	+0 <sup>h</sup> 30	+0 <sup>h</sup> 42	+0 <sup>h</sup> 86	+0 <sup>h</sup> 50	+0 <sup>h</sup> 74	+1 <sup>h</sup> 28	+2 <sup>h</sup> 66	+2 <sup>h</sup> 90	+1 <sup>h</sup> 48	-0 <sup>h</sup> 38	
February	+0 <sup>h</sup> 44	+0 <sup>h</sup> 34	+0 <sup>h</sup> 14	+0 <sup>h</sup> 62	+0 <sup>h</sup> 76	+1 <sup>h</sup> 34	+1 <sup>h</sup> 64	+2 <sup>h</sup> 00	+2 <sup>h</sup> 92	+2 <sup>h</sup> 78	+1 <sup>h</sup> 46	-0 <sup>h</sup> 50	
March	+1 <sup>h</sup> 12	+0 <sup>h</sup> 96	+1 <sup>h</sup> 12	+1 <sup>h</sup> 28	+1 <sup>h</sup> 50	+1 <sup>h</sup> 56	+2 <sup>h</sup> 26	+3 <sup>h</sup> 52	+4 <sup>h</sup> 72	+4 <sup>h</sup> 54	+2 <sup>h</sup> 52	-0 <sup>h</sup> 74	
April	+0 <sup>h</sup> 88	+1 <sup>h</sup> 14	+1 <sup>h</sup> 08	+1 <sup>h</sup> 48	+1 <sup>h</sup> 58	+2 <sup>h</sup> 36	+3 <sup>h</sup> 40	+4 <sup>h</sup> 64	+4 <sup>h</sup> 96	+3 <sup>h</sup> 96	+1 <sup>h</sup> 30	-2 <sup>h</sup> 02	
May	+0 <sup>h</sup> 36	+0 <sup>h</sup> 82	+0 <sup>h</sup> 62	+0 <sup>h</sup> 68	+1 <sup>h</sup> 40	+3 <sup>h</sup> 18	+5 <sup>h</sup> 16	+6 <sup>h</sup> 04	+5 <sup>h</sup> 82	+4 <sup>h</sup> 18	+0 <sup>h</sup> 64	-3 <sup>h</sup> 06	
June	+0 <sup>h</sup> 42	+0 <sup>h</sup> 20	+0 <sup>h</sup> 02	+0 <sup>h</sup> 02	+1 <sup>h</sup> 40	+3 <sup>h</sup> 04	+5 <sup>h</sup> 28	+6 <sup>h</sup> 36	+6 <sup>h</sup> 20	+4 <sup>h</sup> 72	+1 <sup>h</sup> 73	-2 <sup>h</sup> 00	
July	+0 <sup>h</sup> 76	+0 <sup>h</sup> 70	+0 <sup>h</sup> 48	+0 <sup>h</sup> 12	+0 <sup>h</sup> 92	+2 <sup>h</sup> 78	+4 <sup>h</sup> 52	+6 <sup>h</sup> 50	+6 <sup>h</sup> 26	+4 <sup>h</sup> 86	+1 <sup>h</sup> 78	-1 <sup>h</sup> 76	
August	+0 <sup>h</sup> 54	+0 <sup>h</sup> 82	+0 <sup>h</sup> 52	+0 <sup>h</sup> 72	+0 <sup>h</sup> 94	+2 <sup>h</sup> 52	+5 <sup>h</sup> 22	+6 <sup>h</sup> 94	+6 <sup>h</sup> 90	+4 <sup>h</sup> 76	+0 <sup>h</sup> 54	-3 <sup>h</sup> 12	
September	+0 <sup>h</sup> 76	+0 <sup>h</sup> 74	+1 <sup>h</sup> 06	+1 <sup>h</sup> 40	+1 <sup>h</sup> 96	+2 <sup>h</sup> 64	+3 <sup>h</sup> 90	+5 <sup>h</sup> 22	+4 <sup>h</sup> 80	+3 <sup>h</sup> 00	+0 <sup>h</sup> 56	-3 <sup>h</sup> 70	
October	+0 <sup>h</sup> 56	+0 <sup>h</sup> 58	+0 <sup>h</sup> 92	+0 <sup>h</sup> 92	+1 <sup>h</sup> 20	+1 <sup>h</sup> 70	+1 <sup>h</sup> 84	+2 <sup>h</sup> 74	+3 <sup>h</sup> 66	+3 <sup>h</sup> 04	+1 <sup>h</sup> 10	-1 <sup>h</sup> 66	
November	+0 <sup>h</sup> 56	+0 <sup>h</sup> 12	0 <sup>h</sup> 00	+0 <sup>h</sup> 62	+0 <sup>h</sup> 52	+0 <sup>h</sup> 92	+1 <sup>h</sup> 28	+1 <sup>h</sup> 78	+2 <sup>h</sup> 90	+2 <sup>h</sup> 76	+1 <sup>h</sup> 26	-1 <sup>h</sup> 12	
December	-0 <sup>h</sup> 68	+0 <sup>h</sup> 16	-0 <sup>h</sup> 04	+0 <sup>h</sup> 30	+0 <sup>h</sup> 46	+0 <sup>h</sup> 58	+0 <sup>h</sup> 58	+0 <sup>h</sup> 92	+1 <sup>h</sup> 46	+2 <sup>h</sup> 04	+1 <sup>h</sup> 62	-0 <sup>h</sup> 26	
Semi-annual Means	April to Sept.	+0 <sup>h</sup> 62	+0 <sup>h</sup> 74	+0 <sup>h</sup> 63	+0 <sup>h</sup> 74	+1 <sup>h</sup> 37	+2 <sup>h</sup> 75	+4 <sup>h</sup> 58	+5 <sup>h</sup> 95	+5 <sup>h</sup> 82	+4 <sup>h</sup> 25	+0 <sup>h</sup> 90	-2 <sup>h</sup> 61
	Oct. to March	+0 <sup>h</sup> 63	+0 <sup>h</sup> 34	+0 <sup>h</sup> 41	+0 <sup>h</sup> 69	+0 <sup>h</sup> 88	+1 <sup>h</sup> 10	+1 <sup>h</sup> 39	+2 <sup>h</sup> 04	+3 <sup>h</sup> 05	+3 <sup>h</sup> 01	+1 <sup>h</sup> 57	-0 <sup>h</sup> 78
Annual Means		+0 <sup>h</sup> 63	+0 <sup>h</sup> 54	+0 <sup>h</sup> 52	+0 <sup>h</sup> 71	+1 <sup>h</sup> 12	+1 <sup>h</sup> 93	+2 <sup>h</sup> 98	+3 <sup>h</sup> 99	+4 <sup>h</sup> 44	+3 <sup>h</sup> 63	+1 <sup>h</sup> 24	-1 <sup>h</sup> 69

SOLAR-DIURNAL VARIATION : HORIZONTAL FORCE.

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Table LXVII. exhibits the solar-diurnal variation of the Horizontal Force in the different months of the year, after the separation and omission of the larger disturbances. This table is similar in form to Table XXXIII. in vol. II., p. lix.

TABLE LXVII.

Months.	TORONTO ASTRONOMICAL HOURS.											
	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January - - - -	-009	-060	-030	+021	+014	+015	+034	+020	+018	+012	+014	+008
February - - - -	-065	-043	-010	+017	+028	+033	+027	+028	+019	+020	+012	+008
March - - - - -	-108	-070	-030	+017	+041	+051	+040	+035	+030	+021	+017	+014
April - - - - -	-086	-042	+005	+056	+074	+074	+056	+030	+012	+011	+008	+005
May - - - - -	-052	+010	+054	+081	+085	+081	+039	+030	+013	+005	+004	+001
June - - - - -	-042	+004	+058	+085	+095	+089	+067	+039	+015	000	-004	-015
July - - - - -	-032	+007	+049	+081	+092	+078	+055	+037	+014	+009	-004	+005
August - - - - -	-052	+003	+057	+090	+091	+080	+018	+023	+015	+015	+008	+011
September - - - -	-067	+009	+045	+072	+076	+061	+053	+036	+021	+023	+022	+018
October - - - - -	-071	-038	-001	+024	+040	+043	+034	+031	+017	+015	+016	+008
November - - - -	-091	-060	-017	+016	+028	+033	+032	+031	+025	+019	+027	+007
December - - - -	-073	-052	-027	+005	+031	+031	+027	+021	+013	+010	+007	+002
Semi-annual Means } April to Sept. -	-056	-004	+045	+078	+085	+077	+056	+032	+015	+010	+006	+004
} Oct. to March -	-085	-054	-019	+016	+037	+039	+032	+028	+020	+016	+013	+008
Annual Means - - -	-070	-029	+013	+047	+061	+058	+044	+030	+017	+013	+010	+006
<i>(continued)</i>												
Months.	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January - - - - -	000	+006	+005	+012	+022	+020	+031	+031	+024	-008	-051	-101
February - - - - -	+006	-001	+003	-007	+012	+017	+021	+010	-011	-030	-016	-063
March - - - - -	+014	+007	+011	+011	+019	+023	+035	+013	-016	-050	-085	-111
April - - - - -	+007	+008	+003	+012	+021	+021	+014	+011	-023	-070	-102	-112
May - - - - -	-005	-012	-006	-012	-009	-005	+001	-007	-036	-085	-105	-089
June - - - - -	-018	-019	-014	-023	-019	-012	000	-007	-033	-064	-098	-082
July - - - - -	-013	-008	-013	-014	-018	-017	-003	-011	-035	-067	-098	-081
August - - - - -	+007	+003	+009	+001	-007	-003	+001	-017	-062	-105	-118	-099
September - - - -	+013	+008	+011	+003	+021	+024	+015	-009	-054	-103	-130	-115
October - - - - -	+006	+013	+015	+020	+032	+033	+032	+014	-027	-068	-094	-096
November - - - -	+006	+011	+016	+019	+028	+039	+043	+034	-008	-048	-083	-103
December - - - -	-007	-002	+007	+005	+015	+022	+034	+030	+021	-004	-040	-072
Semi-annual Means } April to Sept. -	-002	-003	-002	-006	-002	+002	+005	-006	-041	-082	-109	-097
} Oct. to March -	+004	+005	+010	+010	+022	+026	+033	+022	-003	-034	-065	-092
Annual Means - - -	+001	+001	+004	+002	+010	+014	+019	+008	-022	-058	-087	-094

Table LXVIII. exhibits a corresponding table of the Vertical Force, similar in form to Table XXXIX. in vol. II., p. lxi., but with omission of the larger disturbances.

TABLE LXVIII.

Months.	TORONTO ASTRONOMICAL HOURS.											
	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January - - - -	-0013	+0014	+0042	+0058	+0047	+0056	+0070	+0070	+0064	+0050	+0033	+0022
February - - - -	-0068	-0024	+0042	+0087	+0081	+0086	+0081	+0074	+0055	+0055	+0033	+0027
March - - - - -	-0081	-0046	-0001	+0042	+0056	+0070	+0067	+0061	+0055	+0050	+0041	+0036
April - - - - -	-0077	-0033	+0031	+0068	+0082	+0077	+0063	+0090	+0068	+0027	+0004	-0013
May - - - - -	-0095	-0041	+0029	+0067	+0110	+0131	+0137	+0093	+0069	+0043	+0035	-0018
June - - - - -	-0075	-0067	-0005	+0077	+0116	+0131	+0106	+0111	+0074	+0055	+0017	+0000
July - - - - -	-0377	-0047	+0004	+0081	+0141	+0184	+0174	+0145	+0081	-0064	-0010	-0003
August - - - - -	-0047	+0005	+0070	+0007	+0143	+0159	+0133	+0097	+0081	+0014	+0008	-0033
September - - -	-0023	+0046	+0040	+0109	+0110	+0110	+0095	+0065	+0061	+0015	+0029	-0011
October - - - -	-0055	+0065	+0046	+0077	+0074	+0073	+0075	+0086	+0073	+0061	+0041	+0013
November - - -	-0024	+0020	+0074	+0070	+0073	+0072	+0065	+0068	+0065	+0056	+0042	+0022
December - - -	-0028	+0013	+0051	+0072	+0060	+0054	+0043	+0055	-0054	+0056	+0042	+0022
Semi-annual Means } April to Sept.	-0066	-0023	+0036	+0085	+0117	+0132	+0118	+0100	+0072	+0011	+0017	-0013
} Oct. to March	-0045	-0001	+0013	+0068	+0066	+0068	+0067	+0069	+0061	+0055	+0039	+0024
Annual Means - -	-0055	-0013	+0010	+0076	+0091	+0100	+0092	+0084	+0067	+0048	+0028	+0005
<i>(continued)</i>												
Months.	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .
	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00	'00
January - - - -	-0004	-0022	-0028	-0041	-0047	-0045	-0027	-0027	-0036	-0068	-0072	-0064
February - - - -	+0003	-0033	-0045	-0036	-0038	-0026	-0022	-0010	-0011	-0082	-0119	-0124
March - - - - -	+0003	-0023	-0036	-0020	-0003	-0020	-0011	+0017	+0018	-0038	-0101	-0128
April - - - - -	+0036	-0041	-0038	-0029	-0031	+0004	+0027	+0015	-0004	-0042	-0088	-0105
May - - - - -	-0045	-0063	-0056	-0047	-0026	-0003	+0019	+0001	+0027	-0074	-0125	-0124
June - - - - -	-0036	-0043	-0050	-0065	-0069	+0020	+0004	-0022	-0054	-0079	-0089	-0095
July - - - - -	-0029	-0074	-0119	-0116	-0093	-0052	+0004	-0005	-0028	-0050	-0078	-0087
August - - - - -	-0056	-0069	-0100	-0091	-0091	-0005	+0001	-0023	-0045	-0074	-0078	-0054
September - - -	-0050	-0050	-0059	-0054	-0086	-0067	-0019	-0028	-0013	-0035	-0065	-0049
October - - - -	-0017	-0051	-0011	-0026	-0051	-0063	-0040	-0019	-0027	-0056	-0081	-0091
November - - -	-0009	-0033	-0046	-0050	-0050	-0049	-0061	-0033	-0046	-0077	-0090	-0070
December - - -	-0019	-0027	-0027	-0028	-0056	-0050	-0022	-0037	-0010	-0046	-0068	-0059
Semi-annual Means } April to Sept.	-0030	-0057	-0070	-0066	-0056	-0017	+0006	-0010	-0033	-0069	-0094	-0086
} Oct. to March	-0007	-0031	-0037	-0033	-0041	-0042	-0030	-0018	-0024	-0060	-0089	-0089
Annual Means - -	-0019	-0044	-0054	-0050	-0048	-0030	-0012	-0014	-0029	-0065	-0091	-0087

From the diurnal variations of the Horizontal and Vertical Forces we obtain those of the Inclination and Total Force, as follows:—

TABLE LXIX.

*Diurnal Variation of the Inclination and Total Force, omitting the larger Disturbances.—(The sign + signifies an Augmentation of the North Dip and of the Total Force; the sign — the converse.)*

Toronto Astronomical Hours.	INCLINATION.			TOTAL FORCE.			Toronto Civil Hours.
	Semi-annual Means.		Annual Means.	Semi-annual Means.		Annual Means.	
	April to September.	October to March.		April to September.	October to March.		
	u.	"	"	Parts of Force.	Parts of Force.	Parts of Force.	
12	— 0°5	— 2°5	— 1°5	— '000029	— '000003	— '000017	Midnight.
13	— 1°4	— 4°1	— 2°8	— '000055	— '000025	— '000040	1 a.m.
14	— 2°8	— 7°0	— 4°8	— '000067	— '000028	— '000048	2 a.m.
15	— 0°3	— 6°7	— 3°5	— '000066	— '000026	— '000046	3 a.m.
16	— 1°9	— 13°3	— 7°5	— '000053	— '000024	— '000039	4 a.m.
17	— 2°1	— 15°3	— 8°7	— '000015	— '000022	— '000019	5 a.m.
18	— 2°2	— 18°2	— 10°3	+ '000009	— '000006	+ '000001	6 a.m.
19	+ 2°8	— 12°1	— 4°8	— '000013	— '000002	— '000008	7 a.m.
20	+ 19°1	+ 0°3	+ 9°7	— '000058	— '000024	— '000041	8 a.m.
21	+ 38°2	+ 14°2	+ 26°2	— '000119	— '000078	— '000098	9 a.m.
22	+ 50°5	+ 28°4	+ 39°5	— '000160	— '000127	— '000142	10 a.m.
23	+ 44°8	+ 42°2	+ 43°4	— '000144	— '000143	— '000143	11 a.m.
0	+ 25°1	+ 40°8	+ 32°8	— '000097	— '000038	— '000097	Noon.
1	+ 0°9	+ 27°2	+ 14°0	— '000024	— '000039	— '000031	1 p.m.
2	— 21°0	+ 11°8	— 4°7	+ '000064	+ '000028	+ '000046	2 p.m.
3	— 35°3	— 4°7	— 20°0	+ '000130	+ '000075	+ '000102	3 p.m.
4	— 37°2	— 15°3	— 26°2	+ '000165	+ '000086	+ '000125	4 p.m.
5	— 32°4	— 16°3	— 24°4	+ '000173	+ '000089	+ '000131	5 p.m.
6	— 22°4	— 12°9	— 17°7	+ '000146	+ '000085	+ '000115	6 p.m.
7	— 11°2	— 10°7	— 10°9	+ '000113	+ '000083	+ '000098	7 p.m.
8	— 3°9	— 6°9	— 5°4	+ '000078	+ '000071	+ '000074	8 p.m.
9	— 3°1	— 5°6	— 4°3	+ '000044	+ '000062	+ '000053	9 p.m.
10	— 2°2	— 4°6	— 3°5	+ '000020	+ '000045	+ '000032	10 p.m.
11	— 2°8	— 2°8	— 2°8	— '000009	+ '000028	+ '000009	11 p.m.

In the case of the Total Force, the diurnal variation due to the mean effect of the larger disturbances bears so large a proportion to the regular solar-diurnal variation, that when one is superimposed upon the other, and they are viewed in combination, —as is the case when the diurnal variation is obtained from the whole of the observations including the disturbances,—the true character of the regular ordinary solar-variation is altogether masked, and we are in danger of drawing erroneous conclusions in regard to it. Thus, in Vol. I. of the Toronto Observations, pp. lxx, lxxi, the

diurnal variation being there derived from *the whole* of the observations, the principal features appeared to be, and were stated as follows :—

A principal maximum at 5 hours.

A principal minimum at 15 hours.

A secondary maximum at 18 to 20 hours.

A secondary minimum at 22 or 23 hours.

The first thing we learn by the separation of the disturbances is, that the "principal minimum" so stated as occurring "at 15 hours" is either wholly or in very great part an effect of the disturbances which have their maximum influence in diminution of the force at that hour; and that the true curve of the solar-diurnal variation of the Total Force (like that of the Declination, p. lxxxix) has but one notable inflection in the 24 hours, viz. that which takes place during the hours when the sun is above the horizon. Referring to Table LVII., p. lxxii of the present volume, it will be seen that the diminution of the Total Force at 15 hours occasioned by the larger disturbances averages  $\cdot 000138$  parts of the Total Force in every day of the year; whilst from Table LXX., p. xcii, we learn that the diminution of the force at the same hour from the solar-diurnal variation obtained from the observations remaining after the separation and omission of the larger disturbances amounts to not more than  $\cdot 000045$  parts of the force. The combination of these two effects, referable as they are to different causes, produced therefore at 15 hours the apparent minimum of the force, amounting to  $(\cdot 000138 + \cdot 000045 =) \cdot 000183$  parts of the force. Now of the two components which form the combined amount, it is obvious that the one depending on the disturbances would be increased, and the other component diminished, in amount, if the values assumed to constitute large disturbances of the Horizontal and Vertical Forces had been taken somewhat smaller than they have been assumed in the preceding pages: and as the remark in p. lxxvii regarding the declination-disturbances is equally true in reference to those of the Total Force, viz. that inasmuch as the larger disturbances separated by the processes described can by no means be supposed to include *the whole* of the disturbances of the class to which they belong, we must regard the mean diurnal variation obtained from them simply as a "minimum limit," which would certainly be exceeded if we could succeed in separating the minor effects of the same causes;—we may likewise reasonably infer in the case of the Total Force, that were the process of separation of the disturbances carried a little further than it has been in these pages, the small portion of the diminution of the force at 15 hours ( $\cdot 000045$ ) which remains referable to the solar-variation would be progressively reduced, whilst that of the other component would be increased.

The general conclusion, therefore, to which we may be justified in arriving, is, that although we are unable to separate the effects of the two causes so completely as to assign the exact values of each of the components, we are enabled, by the processes

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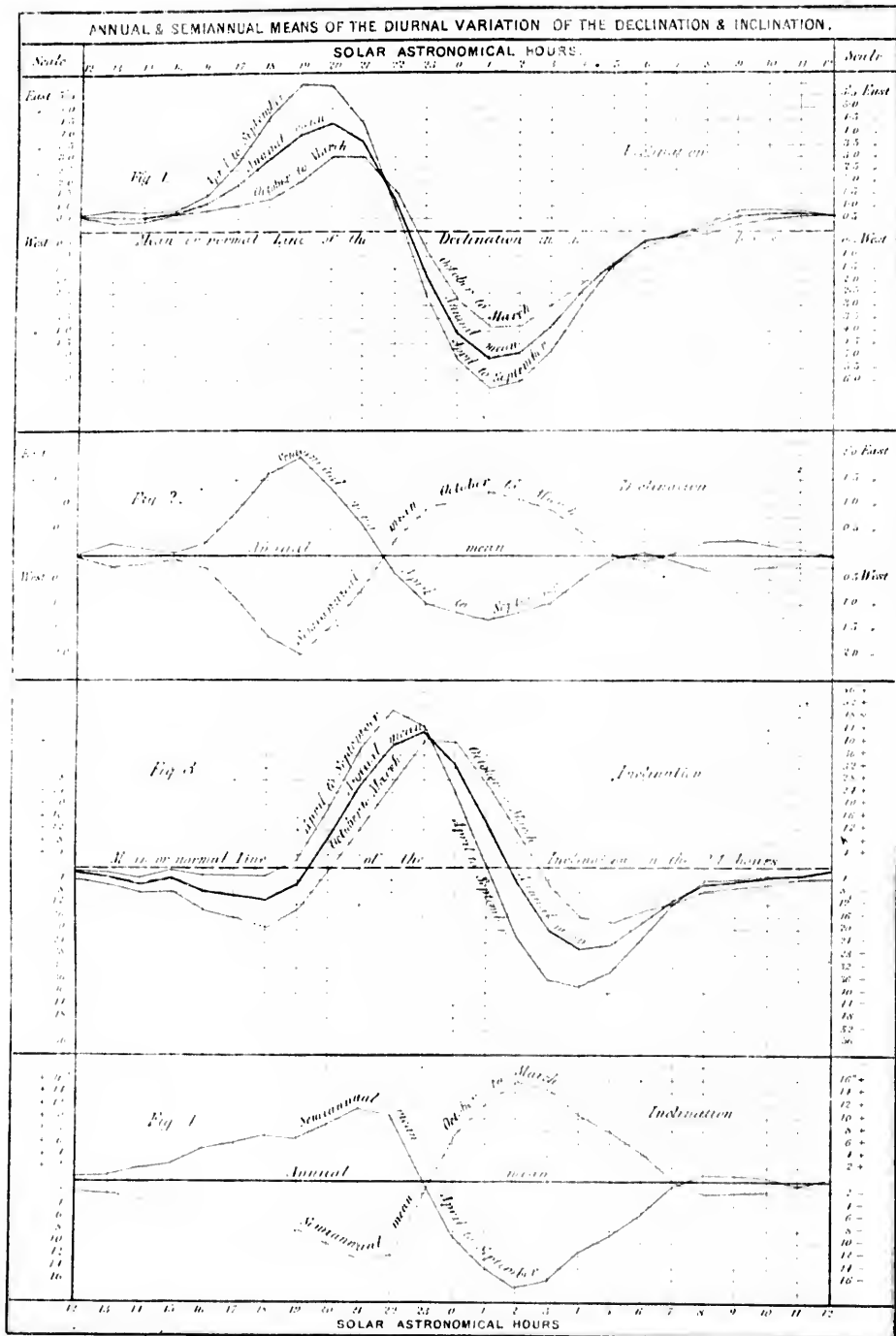
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which have been adopted, to separate them so far, as to have no difficulty in assigning (approximately at least) the general character which each of the components would have if we could make a perfect separation between them. In such case the character of the solar-diurnal variation of the Total Force would appear to be nearly as follows: From about 18 or 19 hours (6 or 7 A.M.) the force begins to diminish sensibly, and continues to do so until nearly 23 hours (11 A.M.), when it reaches its minimum in the 24 hours; it then increases, and continues to do so until about 5 or 6 hours (5 or 6 P.M.); after which it remains without any notable inflection during the hours of the night and until after sunrise. The minimum which occurs between 10 and 11 A.M. (nearer 11 than 10) may be taken at between  $\cdot 000140$  and  $\cdot 000150$  parts of the force below the average in the 24 hours. In Plate IV., Fig. 3., p. xcvi, the *dotted* line shows the diurnal variation derived from the whole of the observations, disturbances included; in this curve, consequently, the mean disturbance-variation is combined with the regular solar-diurnal variation. The *continuous* line presents the diurnal variation derived from the observations when the *larger* disturbances have been separated and withdrawn. This line consequently *approximates* to the form which the curve of the solar-diurnal variation would present if the whole influence of the disturbances could be eliminated. The third or *broken* line further represents this curve on the supposition that the *larger* disturbances constitute about *two-thirds* of the whole disturbing influence.

## ANNUAL INEQUALITY OF THE SOLAR-DIURNAL VARIATION.

The solar-diurnal variation obtained from the mean of the twelve months (entitled "Annual Means," in the tables pp. xc to xciii) represents the variation which it may be presumed would take place in every day of the year if the sun's path were always in the plane of the equator. But this is only the case at the equinoxes; and we have now to inquire into the *inequality* to which the diurnal variation is subject in different parts of the year in consequence of changes in the sun's declination. For this purpose the diurnal variations in the different months may be divided into two groups,—one composed of the six months when the sun has northern declination, and the other of the six months when he has southern declination. The means of each of the two semi-annual groups are shown, for the Declination in Table LXVI., p. xc, and for the Inclination and Total Force in Table LXIX., p. xciii. These means represent, respectively, the diurnal variation at the particular epochs when the sun is half way between the equator and either tropic, and show consequently the character and about half the amount of the range of the inequality which the diurnal variation undergoes in the different parts of the year. The phenomena now under consideration will perhaps be best apprehended by a reference to Plate III., in which (Fig. 1.) the black

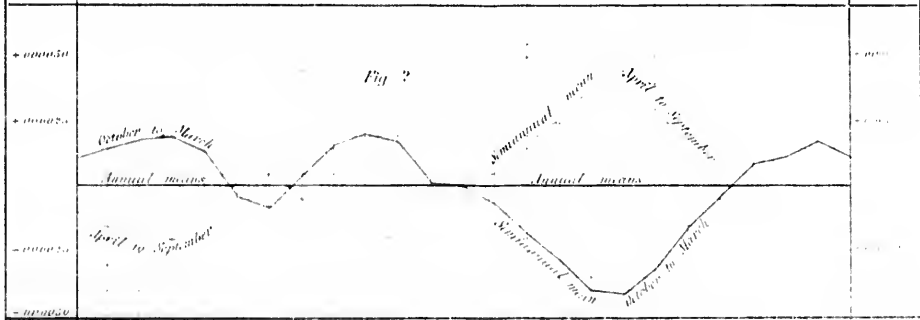
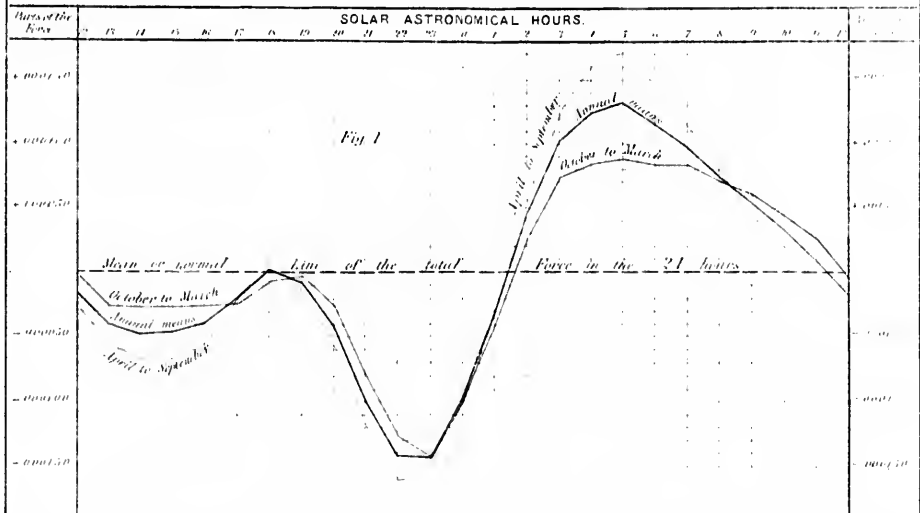
curve exhibits (in arc-value) the mean diurnal variation of the Declination in the twelve months, or that which corresponds strictly with the equinoctial epochs; the red curve shows the mean of the six months (April to September) when the sun is between the equator and the northern tropic; and the blue curve the mean of the six months (October to March) when the sun is between the equator and the southern tropic. In Fig. 2. the same phenomena are represented in a different form: the "annual mean," or the diurnal variation at the equinoxes, which is the black curve in Fig. 1., is here drawn as a straight horizontal line, and the red and blue curves are projected at their respective distances from it at the several hours, and for greater distinctness on a scale of twice the magnitude of that in Fig. 1. The annual and semi-annual curves of the diurnal variation of the Inclination are represented in a similar manner in Figs. 3. and 4. of the same plate; and those of the Total Force in Figs. 1. and 2. of Plate IV. The red and blue curves have a like signification in regard to season in all the six figures; viz. the red curves correspond to the variation when the sun is north of the equator, and the blue curves to the variation when he is south of the equator.

The annual inequality which is thus manifested has been made, in the case of one of the elements, viz. the Declination, the subject of a particular discussion in papers presented respectively to the British Association and to the Royal Society.—("Reports of the British Association," 1854, pp. 355—368; and "Proceedings of the Royal Society," May 18th, 1854, pp. 67—82.) The object of these communications was to call the early notice of magneticians to the fact that the annual inequality of the diurnal variation of the Declination, as severally derived from the observations at Toronto, St. Helena, and Hobarton, presented so remarkable an accord in character and amount as to give reason to believe that they are general phenomena. The discussion was confined to the one element because the corresponding phenomena of the Inclination and of the Total Force had not then been made out. These are now given for Toronto, and will be so for St. Helena and Hobarton in the volumes now preparing, which will contain the suite of the observations at those Observatories, when the discussion will be resumed.

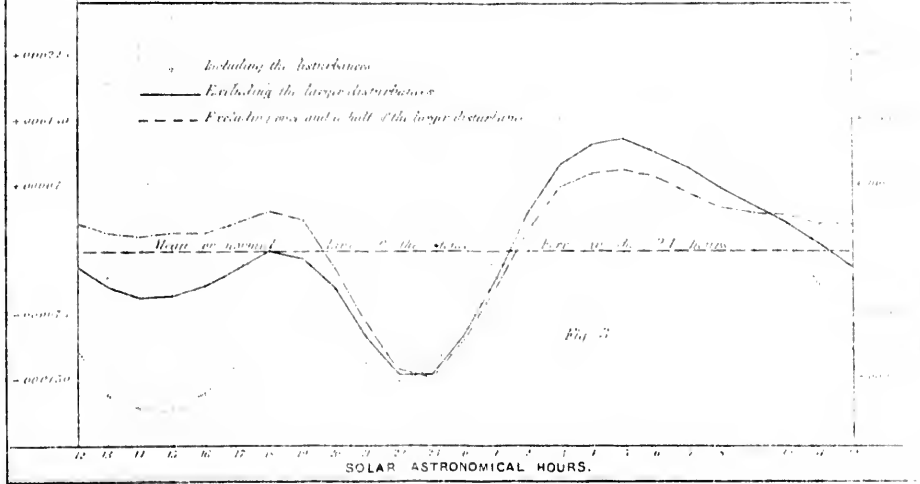
#### SECULAR CHANGE OF THE VERTICAL FORCE.

For this investigation we have the hourly observations of the Vertical Force Magnetometer from February 1844 to June 1848 inclusive. In the following table the monthly means of those observations are collected, having been reduced to a uniform temperature by employing the equivalents for 1° of Fahrenheit obtained in pp. xxii—xxvi.

ANNUAL AND SEMI-ANNUAL MEANS OF THE DIURNAL VARIATION OF THE TOTAL FORCE



SOLAR DIURNAL VARIATION OF THE TOTAL FORCE.



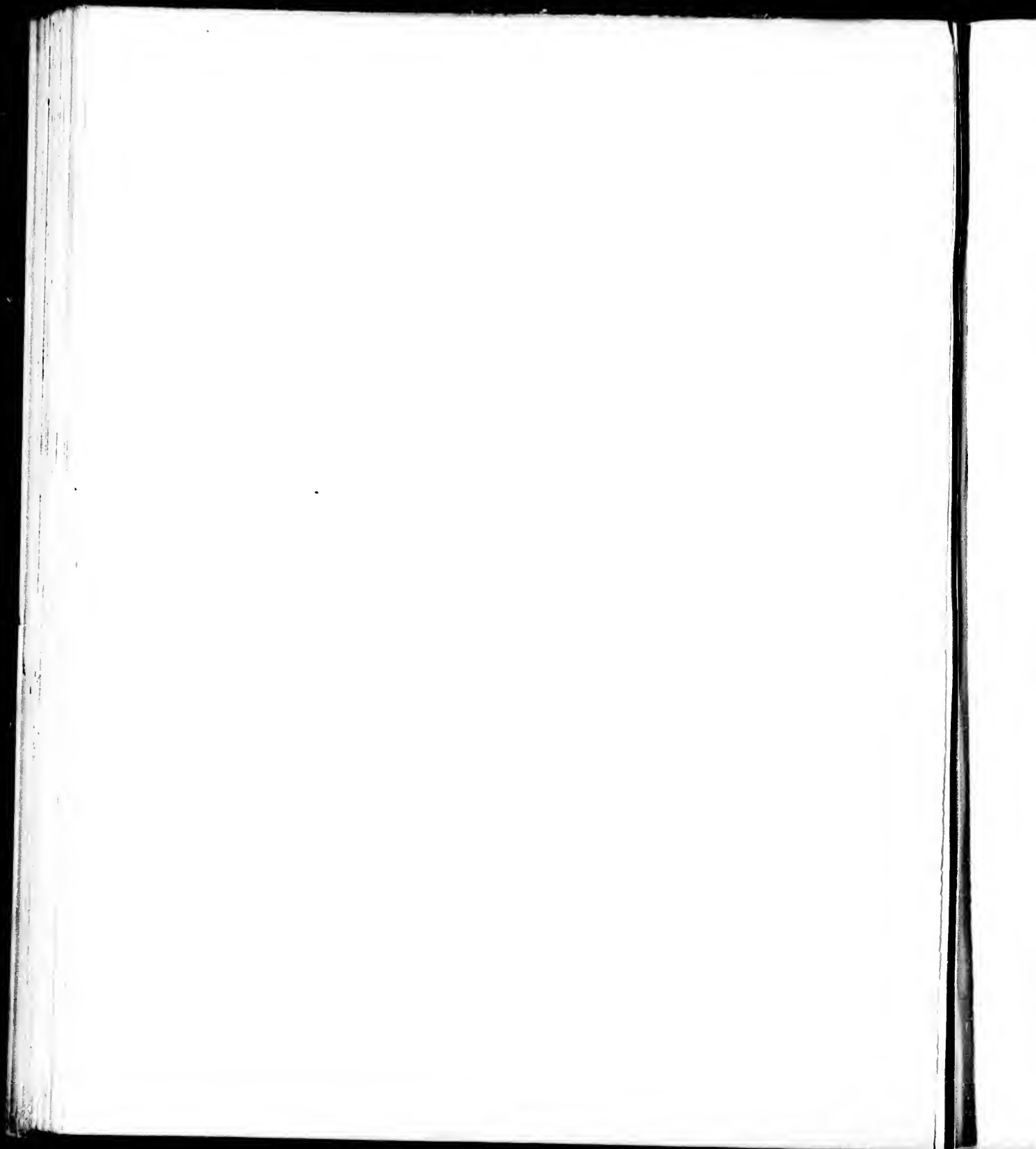


TABLE LXX.

Months.	Monthly Means.		Equivalent to 1° Temperature.	Reduced to 55°.	Months.	Monthly Means.		Equivalent to 1° Temperature.	Reduced to 55°.
1844:	Sc. Div.	o	Sc. Div.	Sc. Div.	1846:	Sc. Div.	o	Sc. Div.	Sc. Div.
February -	124.9	44.3	1.80	105.6	April -	214.0	54.7	1.64	213.5
March -	121.8	46.5	"	106.5	May -	198.3	62.8	"	211.1
April -	99.0	56.5	"	101.7	June -	185.7	68.6	"	208.0
May -	88.0	60.5	"	97.9	July -	173.7	73.6	"	204.2
June -	75.1	61.8	"	92.7	August -	170.8	73.7	"	201.5
July -	60.2	69.7	"	86.7	September -	175.9	69.5	"	199.7
August -	58.5	68.3	"	82.4	October -	197.1	56.6	"	199.7
September -	61.4	65.1	"	79.6	November -	200.6	52.8	"	197.0
October -	83.6	53.4	"	80.7	December -	210.2	43.0	"	190.5
November -	95.1	47.1	"	80.9	1847:				
December -	101.1	42.7	"	79.0	January -	209.0	40.3	"	184.9
1845:					February -	203.4	42.3	"	182.6
January -	99.5	42.7	"	77.4	March -	200.7	41.6	"	183.6
February -	93.3	42.9	"	74.5	April -	188.9	51.4	"	183.0
March -	82.9	48.0	"	70.3	May -	171.8	60.3	"	180.5
April -	72.1	53.6	"	69.6	June -	161.9	63.9	"	176.5
May -	58.6	59.4	"	66.5	July -	143.1	73.0	"	172.6
June -	90.8	67.1	1.80	112.6	August -	145.4	70.4	"	170.7
July -	68.9	72.0	"	99.5	September -	160.8	62.4	"	172.9
August -	197.9	72.9	1.80	230.1	October -	172.5	56.1	"	174.3
September -	148.0	63.1	1.80	162.6	November -	179.8	51.6	"	174.2
October -	157.1	57.6	"	161.8	December -	188.3	45.2	"	172.2
November -	167.1	50.0	"	158.1	1848:				
December -	182.3	40.8	"	156.7	January -	187.2	43.1	"	168.2
1846:					February -	182.5	43.9	"	161.3
January -	171.0	41.7	"	155.5	March -	177.7	46.7	"	161.1
February -	177.0	42.7	"	154.9	April -	165.9	53.3	"	163.1
March -	163.4	50.0	"	151.4	May -	148.9	61.5	"	159.6
					June -	133.7	68.2	"	155.3

Omitting June, July, and August 1845, on account of breaks in the continuity, we have in this table three continuous series, each comprising several months, during which the Magnetometer was undisturbed; viz. February 1844 to May 1845 inclusive, 16 months; September 1845 to March 1846 inclusive, 7 months; and April 1846 to June 1848 inclusive, 27 months. In each of these periods the mean monthly scale readings, when reduced to a uniform temperature, decreased, indicating (on the supposition of the magnetism of the needle having been constant) a diminution in the amount of the terrestrial Vertical Force. The mean value of a scale division in the two first series was .000063 parts of the Vertical Force, and in the third series .000066 parts of the force. The first series will then furnish 16 equations for the value of  $x$ , the mean monthly decrease in scale divisions; the second series 7 equations, and the third series 27 equations for the same. From these we have the values of  $x$  respectively as follows:—

For the first period of 16 months,  $x = 2.64$  scale divisions.

For the second period of 7 months,  $x = 1.47$  " "

For the third period of 27 months,  $x = 2.06$  " "

The mean of the 23 months composing the first and second periods, allowing weight proportioned to the number of months in each, is 2.28 scale divisions per month, = .000143 parts of the force. The mean of the 27 months composing the third period is 2.06 scale divisions, = .0001365 parts of the force. Hence, on the aforesaid supposition that the magnetism of the needle was constant, we may take the mean between two results which differ so little from each other, viz. .00014, as the approximate monthly diminution of the Vertical Force from February 1844 to June 1848 inclusive, corresponding to an *annual* decrease of .0017 parts of the force.

The degree of regularity with which the Vertical Force Magnetometer indicated this decrease may be estimated by the probable error of the monthly decrease in the mean scale readings during the third and longest period, which was of 27 months' duration. The monthly decrease was 2.06 scale divisions; the probable error of 2.06 is  $\pm 0.44$ , which includes the irregularities occasioned by the disturbances. Judging from the very satisfactory performance of the Toronto instrument which is here indicated, it would appear that the capabilities of the Vertical Force Magnetometer, when used with due precaution and care, have been generally very much underrated.

It may be desirable to show how little the question, so important in many other investigations, of the omission or retention of the larger disturbances of the Vertical Force, affects the indication of the amount of the secular change of that element, derived from an unbroken series of observations of the Vertical Force of many months' continuance. The monthly means reduced to 55° Fahrenheit, from April 1846 to June 1848, in page xvii, were taken from the whole of the observations of that period, and consequently included the disturbances; but when the larger disturbances, or all those which exceed 4.0 scale divisions from the respective normals, are withdrawn, the monthly means for the same period, also at 55° Fahrenheit, become as follows:—

TABLE LXXI.

Months.	Scale Divisions.	Months.	Scale Divisions.	Months.	Scale Divisions.
1846:		1847:		1847:	
April - - -	213.0	January - - -	181.6	October - - -	173.9
May - - - -	211.1	February - - -	182.6	November - - -	173.8
June - - - -	208.4	March - - - -	183.6	December - - -	171.5
July - - - -	205.2	April - - - -	183.1	1848:	
August - - -	203.4	May - - - -	180.5	January - - -	168.3
September - -	200.8	June - - - -	176.5	February - - -	165.4
October - - -	200.6	July - - - -	172.8	March - - - -	164.2
November - - -	197.2	August - - -	171.1	April - - - -	163.3
December - - -	190.4	September - -	172.2	May - - - -	159.9
				June - - - -	155.6

From these we obtain by least squares, as the most probable value of the monthly decrease, 2.08 scale divisions, with a probable error of  $\pm 0.44$ , both being almost identical with the results stated in p. xviii as obtained from the monthly means of the observations when the disturbances were retained.

We are naturally led by the satisfactory performance of the Vertical Force Magnetometer between the years 1844 and 1848 to examine the observations made with it at an earlier period, which did not receive perhaps their due consideration at the time, from the belief, which appears to have been pretty general, that this instrument was "unavailable for the determination of changes of long period;" and from the circumstance that the Bifilar Magnetometer, from which so much more was expected, did not yield at Toronto results from which any satisfactory conclusion whatever could be arrived at in regard to the secular change of the other component of the Total Force, viz. the Horizontal Force; for which a distinct instrument, the Unifilar, was in consequence supplied. Reverting to Vol. I. of the Toronto Observations, pp. liii to lvii, we find the following to be the history of the early observations of the Vertical Force Magnetometer:—During the first year, viz. September 1840 to September 1841, the magnet was occasionally (six times in the twelve months) dismantled, for the purpose of having its time of vibration in the *horizontal* plane ascertained. On each of these occasions, consequently, the readings were disconnected, and the continuity of the series interrupted. From October 1841 to October 1843, (at which latter date the magnet was again dismantled to examine the effect of changes of temperature on its magnetic moment,) the magnet was undisturbed, except by its being made to vibrate from time to time in small arcs, in order to ascertain its time of vibration in the *vertical* plane. For this purpose it was not necessary to touch the magnet, as it was put in vibration by another magnet, and was brought back by the  $\mathcal{V}$ 's to its proper position on the supports. The frequency with which this examination was made and the times of vibration severally deduced therefrom, are shown in Vol. I., Table XXXVIII., pp. liv and lv, and in Vol. II., Table XXXV., p. lxi. We have here, therefore, another period of 25 months (October 1841 to October 1843 inclusive) in which, assuming, as before, the constancy of the magnetism of the Vertical Force needle, we know of no cause (excepting variations of temperature) to interfere with the indications of the instrument as a true measure of the variations of the Vertical force. The monthly means of the observations, and of the corresponding temperatures, are contained in the following table. They were taken two-hourly from October 1841 to June 1842, and hourly from July 1842 to October 1843.

TABLE LXXII.

Months.	Scale Divisions.	Temperature.	Months.	Scale Divisions.	Temperature.	Months.	Scale Divisions.	Temperature.
1841 :			1842 :			1843 :		
October	- 96 <sup>o</sup> 7	51 <sup>o</sup> 3	July	- 57 <sup>o</sup> 8	69 <sup>o</sup> 3	April	- 63 <sup>o</sup> 2	53 <sup>o</sup> 0
November	- 102 <sup>o</sup> 7	48 <sup>o</sup> 6	August	- 53 <sup>o</sup> 9	69 <sup>o</sup> 3	May	- 55 <sup>o</sup> 4	57 <sup>o</sup> 3
December	- 109 <sup>o</sup> 5	42 <sup>o</sup> 3	September	- 58 <sup>o</sup> 0	63 <sup>o</sup> 0	June	- 43 <sup>o</sup> 9	63 <sup>o</sup> 7
1842 :			1843 :			1844 :		
January	- 107 <sup>o</sup> 4	41 <sup>o</sup> 4	October	- 65 <sup>o</sup> 4	56 <sup>o</sup> 7	July	- 32 <sup>o</sup> 8	70 <sup>o</sup> 1
February	- 106 <sup>o</sup> 4	41 <sup>o</sup> 7	November	- 76 <sup>o</sup> 3	47 <sup>o</sup> 8	August	- 26 <sup>o</sup> 5	71 <sup>o</sup> 3
March	- 97 <sup>o</sup> 0	47 <sup>o</sup> 9	December	- 81 <sup>o</sup> 9	42 <sup>o</sup> 0	September	- 29 <sup>o</sup> 9	65 <sup>o</sup> 6
April	- 86 <sup>o</sup> 6	54 <sup>o</sup> 4	1845 :			October	- 39 <sup>o</sup> 5	57 <sup>o</sup> 1
May	- 81 <sup>o</sup> 8	57 <sup>o</sup> 0	January	- 75 <sup>o</sup> 6	45 <sup>o</sup> 1			
June	- 72 <sup>o</sup> 2	61 <sup>o</sup> 9	February	- 81 <sup>o</sup> 5	39 <sup>o</sup> 4			
			March	- 78 <sup>o</sup> 6	41 <sup>o</sup> 5			

Putting  $Y'$  for the most probable monthly mean-reading in October 1842,  $x$  for the monthly change,  $y$  the equivalent in scale divisions for  $1^\circ$  of temperature, and  $a$  and  $b$  coefficients respectively of  $x$  and  $y$ ,  $a$  being reckoned in months from the mean epoch, - if earlier and + if later, and  $b$  reckoned in degrees of Fahrenheit from a standard temperature of  $55^\circ$ , - if lower and + if higher, we have 25 equations, from which by least squares we obtain  $Y' = 70\cdot6$  scale divisions,  $x = -2\cdot19$  scale divisions, and  $y = -1\cdot32$  scale divisions.

From the contents of Table XXXVIII., Vol. I. pp. liv and lv, we find the scale coefficient ( $k$ ) during this period to have averaged, with slight and apparently accidental variations,  $\cdot0000935$ ; the magnetic force of the needle having been stronger than in the subsequent period from February 1844 to May 1845, the experiments between October and February 1844 to ascertain the temperature correction having had the effect, as is frequently the case, of sensibly weakening the magnet. The value just found for  $y$  ( $-1\cdot32$ ), multiplied by  $k$ , gives  $\cdot000123$  as the variation, in parts of the force, of the magnetic moment of the needle by a change of  $1^\circ$  of Fahrenheit. This is a somewhat higher value than  $\cdot000110$ , found by subjecting the later observations to a similar process (see *ante*, p. xxvii), but the difference is small, and quite unimportant in the present investigation. The mean monthly decrease of the Vertical Force is  $2\cdot19 \times \cdot0000935 = \cdot00020$ ; or the annual decrease =  $\cdot0024$ . This is also a somewhat larger annual decrease than was found by the later observations, but for this there may be an assignable reason. A secular change of the Vertical Force may proceed from either of two sources (or from both conjointly); viz. a secular change in the Earth's *Total Force*, or a secular change of the Inclination. Whilst whatever secular change may exist in either or both these elements preserves



a uniform rate, the secular change of the Vertical Force will be uniform also; but if the secular change of either varies, that of the Vertical Force will vary also. Now we have reason to know from the monthly observations of the Inclination between January 1841 and December 1855, discussed in the sequel of this volume, that about the beginning of 1844 the secular change of the Inclination altered from a previously existing annual decrease, to an annual increase. Assuming, therefore, the secular change of the Earth's Total Force, whatever it may have been, to have had the same value in 1841—1843 as in 1844—1848, then, in consequence of the alteration in the secular change of the Inclination, the Vertical Force if losing must have lost more (or if gaining must have gained less) in 1841—1843 than in 1844—1848. The observations of the Inclination would therefore lead us to expect what we have found, viz. that the apparent loss of the Vertical Force, as it may be inferred from the Magnetometer observations in 1841—1843 (assuming the constancy of the magnetism of the needle), should be greater than in 1844—1848.

Thus far in the discussion it has been assumed that the magnetism of the Vertical Force needle was constant; we have now to examine, as far as the materials which have been furnished for the purpose will permit, how far this was the case. The data which we possess are the times of vibration in the horizontal or in the vertical planes observed at particular epochs in the course of the Magnetometer observations. We will commence with the times of horizontal vibration, as being those best suited at Toronto to give a satisfactory result. Now, to ascertain whether a change may have taken place in the magnetic moment of a needle during a certain period from the times of horizontal vibration at its commencement and close, and what that change may have been, it is necessary to know by some independent mode the alteration which may have taken place in the interval in the terrestrial Horizontal Force itself. When the Observatories were first instituted, it was hoped that the secular changes of the Horizontal Force might have been derived from the observations made with the Bifilar magnet; but the experience of the two or three first years led to the substitution for that purpose of a distinct apparatus and a special course of observation. It was not until January 1845 that the series of determinations of the absolute Horizontal Force were commenced with the Unifilar Magnetometer, which had been sent from Woolwich to Toronto for the purpose of supplying this failure in the Bifilar. The observations with the Unifilar, discussed in the sequel of this volume, show that from January 1845 to December 1852 inclusive the mean annual decrease of the terrestrial Horizontal Force was  $\cdot 00371$  in absolute measure; or

$$\frac{\Delta X}{X} = -\frac{\cdot 00371}{3\cdot 53} = -\cdot 00105;$$

and as it further appears by the monthly determinations of the Inclination, also discussed in the sequel of this volume, that we may assume the annual increase of the Inclination from the commencement of 1844 to the

end of 1855 to have been approximately uniform, and to have averaged  $0\cdot8$ , we may perhaps venture to extend the estimate of the annual decrease of the Horizontal Force ( $\frac{\Delta X}{X} = -\cdot00105$  from January 1845 to December 1852) to one year beyond those limits—namely, 1844; whereby we may obtain a standard of comparison for the times of horizontal vibration of the Vertical Force needle observed between February 1844 and June 1848, applicable to the whole of the Magnetometer observations in Table LXX.

(It will be seen by the observations of the Inclination that we should not be justified in extending the same annual increase of the Inclination to the years preceding 1844; and since the annual change of the Horizontal Force is in part dependent on that of the Inclination, we are not possessed of sufficient data to permit a satisfactory deduction of the rate of change of the magnetism of the needle to be derived from its horizontal vibrations from an earlier date than February 1844.)

In November 1843, and to the beginning of February 1844, the Vertical Force needle was dismounted for the purpose of having experiments made on its temperature correction. By these experiments the magnetism of the needle was considerably weakened: its time of *vertical* vibration, which had been  $10\cdot31$  in October 1843, was found in February 1844,  $12\cdot79$  (Vol. II., Table XXXV., p. lxi). It happened accidentally that at the time when the second Toronto volume was published, it was not known at Woolwich that any observations had been made on the time of horizontal vibration between September 30, 1841, and March 26, 1846 (as stated in Vol. II., p. lxi). It was obvious, however, from the difference in the times of vertical vibration referred to above, that the needle had sustained a considerable loss of force during the temperature experiments (October 1843 to February 1844), and that this must have been known to Captain Younghusband, who was then Director of the Observatory. Believing, from the usual careful habits of that officer, that it was very unlikely that he should have remounted the needle for a fresh series of Magnetometer observations without previously observing its time of horizontal vibration, I had the "Miscellaneous Register Book" examined, in which a record of the observations, if made, would probably be found, and which book had been sent home to Woolwich when the Observatory was transferred to the provincial authorities. I have thus ascertained that the time of horizontal vibration was observed, as I had expected, on the 5th and 6th of February 1844, before the needle was remounted, and again in the beginning of June 1845, when the first of the continuous series in Table LXX. was completed. The time of horizontal vibration was again observed on the 26th of March 1846, when the second continuous series terminated. The needle was then remagnetized; its time of horizontal vibration observed before it was remounted, in the

beginning of April 1846, for the third series; and again observed on the 28th of February 1849. The times of vibration at these several dates were as follow:—

1844, February 5th and 6th	- Three observations	- 11 <sup>n</sup> ·460.
1845, June	- " "	- 11·490.
1846, March 26th	- " "	- 11·4965.
1846, April 1st	- " "	- 10·2879.
1849, February 28th	- Two observations	- 10·3649.

For the change in the magnetic moment of the needle in the first of the three continuous series in Table LXX. (viz. of 16 months, from February 1844 to May 1845 inclusive) we have consequently an increase in the time of the needle's horizontal vibration of  $(11\cdot490 - 11\cdot460 =) 0\cdot030$  in 16 months, or  $\cdot0223$  in a year, corresponding to a proportionate decrease of  $\cdot00389$  in parts of the force. But the Horizontal Force itself decreased during the same period at the average rate of  $\cdot00105$  in a year (p. ci). We find, therefore, the proportionate loss of force of the needle between February 1844 and June 1845 to have been at the mean annual rate of  $(\cdot00389 - \cdot00105 =) \cdot00284$ . Now it has been shown (p. xcviii) that in the same period the monthly scale-readings of the Vertical Force Magnetometer diminished at the average rate of 2·64 scale divisions in a month, or 31·68 in a year, corresponding to  $(31\cdot68 \times \cdot0000628 =) \cdot00199$  parts of the force; therefore the true secular change of the Vertical Force in those 16 months, allowing for the change in the magnetism of the needle, was an *increase* at the mean rate of  $(\cdot00284 - \cdot00199 =) \cdot00085$  in a year.

For a similar deduction during the second continuous series in Table LXX. (seven months, from September 1845 to March 1846) we have an increase in the time of horizontal vibration of  $(11\cdot4695 - 11\cdot460 =) 0\cdot0095$  in seven months, or  $\cdot0163$  in a year, corresponding to a proportionate decrease of  $\cdot00284$  in parts of the force; we have, therefore, a proportionate loss of force of the needle between September 1845 and March 1846 of  $(\cdot00284 - \cdot00105 =) \cdot00179$ . The mean monthly decrease in the scale-readings of the Magnetometer (p. xcviii) was 1·47 scale divisions, or 17·64 in a year, corresponding to  $(17\cdot64 \times \cdot0000628 =) \cdot00111$  parts of the force. Therefore the secular change of the Vertical Force in these seven months was an increase at the mean rate of  $(\cdot00179 - \cdot00111 =) \cdot00068$  in a year.

For the third and longest series in Table LXX. (27 months, April 1846 to June 1848 inclusive) we have a mean rate of increase in the time of the needle's horizontal vibration, derived from the observations of the 1st of April 1846 and the 28th of February 1849, of  $(10\cdot3649 - 10\cdot2879 =) 0\cdot077$  in 35 months, or  $\cdot0264$  in a year, corresponding to a proportionate decrease of  $\cdot00513$  in parts of the force; and therefore an annual diminution of the magnetic moment of the needle of  $(\cdot00513 - \cdot00105 =) \cdot00408$  in a year. The mean monthly decrease in the scale-readings of the Mag.

netometer between April 1, 1846, and June 30, 1848, was 2·08, or 24·96 in a year; and the corresponding decrease in parts of the force ( $24·96 \times \cdot0000662 =$ )  $\cdot00165$ ; therefore the secular change of the Vertical Force in this period, allowing for the change in the magnetism of the needle, was an increase at the mean annual rate of ( $\cdot00108 - \cdot00165 =$ )  $\cdot00243$  parts of the force.

Between February 1844 and June 1848 we have, therefore, three continuous series with the Vertical Force Magnetometer, by each of which we find the secular change of the Vertical Force at Toronto to have been an increase. The results collected are as follow:—

February 1844 to May 1845 inclusive, 16 months;	rate of annual increase	$\cdot00085$
September 1845 to March 1846 " 7 "	" "	$\cdot00068$
April 1846 to June 1848 inclusive 27 "	" "	$\cdot00243$

Giving each of these results weight proportioned to the time it represents, we have a mean annual increase of the Vertical Force derived from 50 months of Magnetometer observations of  $\cdot06168$  parts of the force.

*Secular Change of the Total Force.*—We have thus the mean annual secular change of the Vertical Force between February 1844 and June 1848,  $\frac{\Delta Y}{Y} = +\cdot00168$ ; and from the monthly determinations of the absolute Horizontal Force, discussed in the sequel of this volume,  $\frac{\Delta X}{X}$  at the same period =  $-\cdot00105$ ; and as  $\frac{\Delta \phi}{\phi} = \cos^2 \theta \cdot \frac{\Delta X}{X} + \sin^2 \theta \cdot \frac{\Delta Y}{Y}$ , and  $\theta$  at the mean epoch =  $75^\circ 16'$ , we have—

$$-\cdot00105 \cdot \cos^2 75^\circ 16' + \cdot00168 \cdot \sin^2 75^\circ 16' = +\cdot0015 = \frac{\Delta \phi}{\phi}$$

or  $\Delta \phi = +\cdot0015 \times 13\cdot9 = +\cdot0208$ , the annual increase of the Total Force in absolute measure.

The conclusions to be drawn from the times of *vertical* vibration, in regard to the loss of magnetic force which the needle sustained during the Magnetometer observations (and, correlatively, to the increase of the Earth's Vertical Force during the same period), must necessarily be less satisfactory than those derived from the times of horizontal vibration, because we have no independent measure, by a distinct apparatus (as we have in the case of the Horizontal Force), of the change which the Vertical Force underwent in the interval during which the vertical vibrations measured the constant or varying product of the Earth's Vertical Force into the force of the needle. In referring to Vol. II., Table XXXV., p. lxi, it will be seen that the monthly series of observations of

the times of vertical vibration between February 1844 and June 1848 may be divided into two distinct portions; the first comprising from February 1844 to March 1846 (the needle having been remagnetized on the 28th of March 1846), and the second portion comprising from April 1846 to June 1848. In the first interval the small decrease which will be seen to have taken place in the times of vibration indicates an increase,—and on the other hand the small increase in the times of vibration in the second interval indicates a decrease,—in the product of the magnetic force of the needle into the Earth's Vertical Force. The increase in the one interval and the decrease in the other are both extremely small, and, when the two intervals are taken together, in great measure counterbalance each other. We may therefore regard the times of vertical vibration as indicating a very near approach to constancy in the conjoint forces of the earth and of the needle. But the combined evidence of the Magnetometer observations and of the times of *horizontal* vibration has shown, that throughout this whole period the needle was losing force, and therefore the earth must have gained the force which the needle lost, — or the times of vertical vibration would not have approached so nearly to constancy. The times of vertical vibration are therefore in accordance with those of horizontal vibration, in manifesting that the Vertical Force of the earth was increasing from 1844 to 1848; though, for many reasons, they are less suited than the times of horizontal vibration to give, by their combination with the Magnetometer observations, a satisfactory result in regard to the *rate* of increase.

It is much to be desired that the subject which has been here considered should receive a further elucidation by the continuance of observations of the same kind at the Toronto Observatory, which has now passed into the hands of a provincial administration, and retains the instruments with which the valuable observations which have now been discussed were made. To these the method since devised by Dr. Lloyd for the absolute determination of the Vertical Force and of its variations from time to time,—and of the Total Force and its variations,—by *direct* observation, would be an important auxiliary. It is a research which might also well repay the Directors of the Harvard College Observatory in Cambridge, in the United States, should they think fit to resume their magnetical observations, which commenced with such good promise, but were too soon abandoned.

It has been conceived that the progressive approach of the minor maximum of the force, now in the eastern part of Siberia and moving towards America, should augment the force at the American maximum, and that consequently the force at the American maximum ought at the present epoch to be increasing. If this supposition be correct, the observed increase of the total force at Toronto may be a consequence of the general increase of the total force in the vicinity of the American maximum, from the nearer approach of the two points of maxima to each other; or it may be a consequence of a systematic movement of translation of the isodynamic lines in the same vicinity;

or it may be due in part to each of these causes. The solution of such questions, which are of the first importance in relation to the secular change which the general magnetic condition of the earth is undergoing, seems imperatively to require the employment of cotemporaneous or nearly cotemporaneous observations at more than one locality in the region surrounding the maximum. In this respect Toronto is at present unaided: there is, indeed, a Magnetic Observatory at Sitka, on the north-west side of the American continent; but, unfortunately, we are not supplied by it with corresponding observations to those which have been here discussed, as the central Observatory at St. Petersburg did not succeed in constructing a Vertical Force Magnetometer. Amongst the British possessions in that quarter of the globe, perhaps Newfoundland presents practically the most eligible site for a Magnetic Observatory to be maintained in action for at least five or six years.

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#### HORIZONTAL FORCE IN ABSOLUTE MEASURE.

The second volume of the Toronto Observations contains, in pp. 595—633, a detailed statement of the monthly observations made with the Unifilar Magnetometer to determine the value of the Horizontal Force in absolute measure, and its annual and secular variations. In the reference made to those observations in the early part of the same volume, pp. lxxxix and xc, it is stated that “as *absolute* determinations the results can only yet be considered as provisional, as the exact values of the distances between the centres of the suspended and deflecting magnets, and of the constants of inertia and of induction, will have to be finally determined with the new standard scale and weights on the return of the Unifilar to England.”

Since the publication of that volume, the Unifilar has been brought back to Woolwich, and the graduation of its scale has been compared by Mr. Welsh, of the Kew Observatory of the British Association, with a certified copy of the British standard scale belonging to that observatory. The weight and dimensions of the two rings, employed at Toronto to determine the moment of inertia of the deflecting magnet and the stirrup in which it was suspended during the vibration-observations, have also been examined by Mr. Welsh, and their values assigned in terms of authenticated copies of the British standards of weight and measure.

Mr. Welsh's memorandum of the result of his measurements is as follows:—

*Measurement of the Distance-arms of the Unifilar of the Toronto Observatory, and of the Half-length of the Magnet.*

Distance of the point, 1 foot, on the one arm, to the point, 1 foot, on the other arm, = 23·960 inches at 62°.

The two arms are not in this instrument of one continuous piece of metal; it is therefore necessary in this case to consider the error of the distance as a constant error at all distances. It appears, therefore, that all the observed distances should be corrected by — 0·001666 foot.

The half-length of the magnet I. 18 = 0·1526 of a foot, with a probable error arising from irregularity of figure of  $\pm 0\cdot0001$  foot.

*Dimensions of the Inertia Rings employed at the Toronto Observatory.*

Ring No. 1.

Weight, 288·900 grains; external diameter, 2·9886 inches at 62°; internal diameter, 2·6097 inches at 62°.

Ring No. 3.

Weight, 358·462 grains; external diameter, 3·6472 inches at 62°; internal diameter, 3·2626 inches at 62°.

*Kew Observatory, May 1856.*

J. WELSH.

1. In respect to the deflection distances. In different experiments the near end of the deflecting magnet was placed at 1·0 ft., 1·1 ft., 1·2 ft., and occasionally at 1·3 ft. from the centre of the suspended magnet, as measured on the graduated arms of the Unifilar; corresponding by Mr. Welsh's memorandum to 0·9983 ft., 1·0983 ft., 1·1983 ft., and 1·2983 ft. of British measure at 62° Fahrenheit. To these must be added in each case half the length of the deflecting magnet, making the deflection distances in the different experiments respectively 1·1509 ft., 1·2509 ft., 1·3509 ft., and 1·4509 ft. On reference to Vol. II. p. 634, it will be seen that these differ only ·0001 in each case from the distances as measured by Captain Lefroy at Toronto in 1851, and employed by Captain Younghusband in computing the values of  $\frac{m}{X}$  in pp. 593–633, except that the temperature of the scale on which the measurements were made by Captain Lefroy at Toronto was 50° Fahrenheit, and in Mr. Welsh's measurements 62° Fahrenheit. These differences are so minute, that it has not been considered expedient to make any alterations in the values of  $\frac{m}{X}$  as computed by Captain Younghusband.

2. The weight and dimensions of the inertia rings as determined by Mr. Welsh, do not harmonize quite so well with the memorandum which accompanied the rings when sent to Toronto by their maker, Mr. William Jones, of Rupert Street; and it has therefore been necessary to recompute the moment of inertia of the deflecting magnet with the stirrup in which it was placed for the experiments of vibration. Employing Mr. Welsh's measurements,  $K'$ , the moment of inertia of the ring, =  $3\cdot94785$  for ring 1, and  $7\cdot45135$  for ring 3. Substituting these values for  $3\cdot93024$  and  $7\cdot43213$ , derived from previous measures, and employed by Captain Younghusband in calculating the log. value of  $\pi^2 = 1\cdot6558266$  as given in the memorandum in Vol. II. p. 634, we obtain the corrected log. values, viz.  $1\cdot65724$  by ring 1, and  $1\cdot65748$  by ring 3; and by the mean of the two rings,  $1\cdot65736$ . The values of  $T^2$  and  $T^1$  (the times of vibration of the magnet with and without the rings) employed by Captain Younghusband were obtained by three experiments of vibration with the large ring, three with the small ring, and three with the magnet alone, made in the autumn of 1845.

The results of the whole series, thus finally computed, are given in the following table:—

TABLE LXXIII.

*Abstract of the Monthly Determinations of the Horizontal Force in absolute Measure.—The "Times of Vibration" are corrected for the Torsion of the Suspension Thread and the Rate of the Chronometer, and are reduced to an uniform Temperature of 50°, and to the Mean Bifilar Reading on the Day of Observation. The Values of  $\frac{m}{X}$  are obtained from the Distances and from the Angles of Deflection stated in detail in Vol. II. pp. 596—632. The Angles of Deflection are reduced to the same uniform Temperature as the Times of Vibration, and to the Mean Bifilar Reading on the Day of Observation.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).
			$m X$ .	$\frac{m}{X}$	
1845:	<i>s.</i>				
January 15	4'8132	1	0'29249	9'19304	3'5160
" 16	4'8126	1	0'29260	9'19230	3'5191
" 17	4'8176	1	0'29170	9'19216	3'5463
February 14	4'8185	1	0'29154	9'19245	3'5444
" 15	4'8138	1	0'29239	9'19295	3'5159
" 17	4'8112	1	0'29286	9'19217	3'5510
March 11	4'8163	1	0'29194	9'19213	3'5462
" 15	4'8176	1	0'29171	9'19171	3'5180
April 11	4'8161	1	0'28658	9'18782	3'5431
" 15	4'8167	1	0'28646	9'18755	3'5437
" 16	4'8149	1	0'28680	9'18705	3'5171



HORIZONTAL FORCE IN ABSOLUTE MEASURE.

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TABLE LXXIII.—*continued.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units)
			<i>m</i> X.	<i>m</i> X	
1845:					
May	13	1	0'28615	9'18692	3'5450
"	14	1	0'28611	9'18578	3'5509
"	15	1	0'28587	9'18578	3'5485
June	14	1	0'28608	9'18619	3'5477
"	16	1	0'28587	9'18504	3'5515
"	17	1	0'28613	9'18444	3'5550
July	14	1	0'28493	9'18431	3'5507
"	15	1	0'28354	9'18283	3'5511
"	16	1	0'28313	9'18255	3'5505
August	15	1	0'28283	9'18287	3'5480
"	16	1	0'28192	9'18213	3'5473
"	18	1	0'28142	9'18182	3'5465
September	16	2	0'27407	9'17412	3'5479
"	17	2	0'27354	9'17408	3'5460
"	18	1	0'27345	9'17422	3'5452
October	14	1	0'27650	9'17740	3'5445
"	15	1	0'27623	9'17657	3'5467
"	16	1	0'27662	9'17653	3'5485
November	13	1	0'27604	9'17598	3'5481
"	14	1	0'27489	9'17490	3'5481
"	15	1	0'27448	9'17530	3'5448
December	15	1	0'26943	9'16995	3'5461
"	16	1	0'26836	9'16974	3'5425
"	17	1	0'25386	9'15118	3'5468
"	18	1	0'25645	9'15450	3'5562
1846:					
January	14	2	0'25798	9'15778	3'5490
"	15	2	0'25690	9'15656	3'5495
"	16	1	0'25548	9'15614	3'5454
"	17	1	0'25588	9'15692	3'5439
"	22	1	0'25569	9'15623	3'5460
February	14	2	0'25691	9'15898	3'5399
"	16	2	0'25675	9'15842	3'5414
"	17	2	0'25611	9'15780	3'5426
March	14	2	0'25081	9'15275	3'5403
"	16	2	0'25158	9'15297	3'5424
"	17	2	0'25026	9'14990	3'5493
"	18	2	0'24902	9'14994	3'5411
April	15	2	0'24572	9'14702	3'5428
"	17	2	0'24560	9'14706	3'5422
"	18	2	0'24525	9'14742	3'5392
May	13	2	0'24520	9'14663	3'5421
"	14	2	0'24495	9'14687	3'5403
"	16	2	0'24517	9'14670	3'5419
June	16	2	0'24471	9'14536	3'5455
"	17	2	0'24467	9'14540	3'5452
"	18	2	0'24462	9'14498	3'5467
July	14	2	0'24375	9'14448	3'5452
"	15	2	0'24355	9'14483	3'5429
"	16	2	0'24362	9'14420	3'5458

## ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

TABLE LXXIII.—*continued.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).			
			$m \times$	$\frac{m}{X}$				
1846:								
August	13	-	5'1016	2	0'24194	9'14382	3'5405	} 3'5397
"	14	-	5'1030	2	0'24171	9'14366	3'5401	
"	15	-	5'1010	2	0'24151	9'14392	3'5381	} 3'5390
September	14	-	5'1114	2	0'23977	9'14246	3'5372	
"	15	-	5'1115	2	0'24026	9'14231	3'5397	} 3'5402
"	16	-	5'1110	2	0'24035	9'14228	3'5402	
October	12	-	5'1170	2	0'23933	9'14165	3'5387	} 3'5386
"	13	-	5'1169	2	0'23934	9'14197	3'5374	
"	14	-	5'1163	2	0'23945	9'14149	3'5398	} 3'5360
November	16	-	5'1177	1	0'23921	9'14028	3'5438	
"	17	-	5'1180	2	0'23916	9'14229	3'5354	} 3'5327
"	18	-	5'1209	2	0'23866	9'14245	3'5327	
December	15	-	5'1196	2	0'23889	9'14058	3'5412	} 3'5443
"	16	-	5'1182	2	0'23914	9'14006	3'5444	
"	17	-	5'1174	2	0'23926	9'14021	3'5443	
1847:								
January	18	-	5'1261	2	0'23778	9'13899	3'5432	} 3'5435
"	19	-	5'1240	2	0'23814	9'13881	3'5454	
"	20	-	5'1266	2	0'23770	9'13916	3'5422	} 3'5422
"	21	-	5'1231	2	0'23824	9'13943	3'5432	
February	15	-	5'1283	1	0'23741	9'13888	3'5422	} 3'5426
"	16	-	5'1293	1	0'23721	9'13892	3'5413	
"	17	-	5'1280	1	0'23746	9'13920	3'5410	} 3'5463
"	18	-	5'1237	1	0'23819	9'13865	3'5463	
"	19	-	5'1281	1	0'23744	9'13884	3'5424	} 3'5352
March	15	-	5'1323	1	0'23673	9'13993	3'5352	
"	16	-	5'1286	1	0'23736	9'13903	3'5413	} 3'5386
"	17	-	5'1312	1	0'23692	9'13919	3'5389	
"	18	-	5'1305	1	0'23704	9'13926	3'5391	} 3'5373
April	14	-	5'1331	2	0'23660	9'13927	3'5373	
"	15	-	5'1338	2	0'23648	9'13935	3'5365	} 3'5348
"	16	-	5'1311	2	0'23638	9'14011	3'5318	
"	19	-	5'1345	1	0'23636	9'13995	3'5335	} 3'5409
May	15	-	5'1312	2	0'23692	9'13870	3'5409	
"	17	-	5'1358	2	0'23614	9'13939	3'5349	} 3'5392
"	19	-	5'1315	2	0'23687	9'13906	3'5392	
"	20	-	5'1329	2	0'23663	9'13879	3'5394	} 3'5396
June	15	-	5'1306	1	0'23702	9'13911	3'5396	
"	16	-	5'1341	2	0'23643	9'13857	3'5395	} 3'5388
"	17	-	5'1328	2	0'23665	9'13894	3'5388	
"	18	-	5'1298	2	0'23716	9'13875	3'5417	} 3'5350
July	14	-	5'1388	3	0'23563	9'13886	3'5350	
"	15	-	5'1387	3	0'23565	9'13816	3'5379	} 3'5368
"	16	-	5'1412	2	0'23523	9'13803	3'5368	
August	17	-	5'1413	2	0'23521	9'13646	3'5431	} 3'5424
"	18	-	5'1413	2	0'23521	9'13675	3'5419	
"	19	-	5'1438	2	0'23480	9'13621	3'5423	} 3'5335
September	15	-	5'1516	2	0'23347	9'13607	3'5335	
"	16	-	5'1550	2	0'23290	9'13644	3'5337	} 3'5348
"	17	-	5'1529	2	0'23325	9'13653	3'5348	

HORIZONTAL FORCE IN ABSOLUTE MEASURE.

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TABLE LXXIII.—*continued.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).
			<i>m</i> X.	$\frac{m}{X}$ .	
1847 :	<i>s.</i>				
October 16	5'1544	2	0'23300	9'13573	3'5370
" 18	5'1572	2	0'23255	9'13591	3'5314
" 19	5'1578	2	0'23243	9'13622	3'5327
" 20	5'1580	2	0'23249	9'13587	3'5310
November 16	5'1576	2	0'23246	9'13550	3'5357
" 17	5'1576	2	0'23246	9'13540	3'5362
" 18	5'1566	2	0'23263	9'13518	3'5378
December 16	5'1587	2	0'23228	9'13469	3'5384
" 18	5'1649	2	0'23123	9'13539	3'5313
" 21	5'1708	2	0'23025	9'13573	3'5258
" 24	5'1636	2	0'23145	9'13263	3'5434
1848 :					
January 17	5'1687	2	0'23060	9'13188	3'5307
" 18	5'1661	2	0'23103	9'13505	3'5320
" 19	5'1638	2	0'23142	9'13443	3'5359
February 16	5'1653	1	0'23117	9'13438	3'5350
" 17	5'1653	2	0'23117	9'13427	3'5355
" 18	5'1655	2	0'23113	9'13405	3'5363
" 19	5'1662	2	0'23102	9'13453	3'5339
March 13	5'1623	2	0'23167	9'13387	3'5392
" 14	5'1617	2	0'23177	9'13433	3'5378
" 15	5'1654	2	0'23115	9'13450	3'5345
April 17	5'1658	2	0'23108	9'13424	3'5372
" 18	5'1662	2	0'23102	9'13392	3'5363
" 19	5'1639	2	0'23140	9'13418	3'5368
May 15	5'1638	2	0'23142	9'13361	3'5392
" 16	5'1626	2	0'23162	9'13383	3'5391
" 17	5'1613	2	0'23184	9'13418	3'5374
June 15	5'1668	2	0'23091	9'13379	3'5365
" 16	5'1653	2	0'23117	9'13415	3'5360
" 17	5'1648	2	0'23125	9'13391	3'5372
July 18	5'1687	2	0'23060	9'13305	3'5382
" 19	5'1653	2	0'23117	9'13318	3'5399
" 20	5'1711	2	0'23020	9'13348	3'5348
August 15	5'1892	2	0'22716	9'13062	3'5340
" 16	5'1839	2	0'22804	9'13056	3'5379
" 17	5'1877	2	0'22741	9'13026	3'5366
" 18	5'1865	2	0'22761	9'13073	3'5355
September 15	5'1952	1	0'22615	9'12982	3'5332
" 16	5'1929	2	0'22654	9'12989	3'5345
" 19	5'1958	2	0'22605	9'13004	3'5319
October 17	5'2011	2	0'22517	9'12909	3'5321
" 19	5'2089	2	0'22387	9'13024	3'5222
" 20	5'2128	2	0'22322	9'12982	3'5213
" 21	5'2010	2	0'22518	9'12972	3'5296
November 21	5'2088	2	0'22388	9'12932	3'5260
" 22	5'2112	2	0'22348	9'12915	3'5251
" 23	5'2'33	2	0'22313	9'12921	3'5235
December 19	5'2019	2	0'22503	9'12896	3'5322
" 20	5'2022	2	0'22498	9'12904	3'5316
" 21	5'2044	2	0'22462	9'12869	3'5316

TABLE LXXIII.—*continued*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).
			<i>m</i> X	<i>m</i> X	
1849 :					
	<i>s.</i>				
January	15 - 5'2095	2	0'22377	9'12877	3'5278
"	16 - 5'2058	2	0'22438	9'12781	3'5310
"	17 - 5'2054	2	0'22445	9'12798	3'5338
February	17 - 5'2071	2	0'22417	9'12778	3'5331
"	19 - 5'2106	2	0'22358	9'12761	3'5317
"	20 - 5'2127	2	0'22323	9'12805	3'5286
March	19 - 5'2065	2	0'22427	9'12747	3'5351
"	20 - 5'2089	2	0'22387	9'12761	3'5328
"	21 - 5'2067	2	0'22423	9'12769	3'5341
April	19 - 5'1998	2	0'22537	9'12721	3'5407
"	20 - 5'2013	2	0'22513	9'12691	3'5410
"	21 - 5'2153	2	0'22280	9'12678	3'5319
May	16 - 5'2052	2	0'22448	9'12587	3'5425
"	17 - 5'2036	2	0'22475	9'12690	3'5394
"	18 - 5'2035	2	0'22475	9'12692	3'5422
June	18 - 5'2105	2	0'22360	9'12541	3'5407
"	19 - 5'2058	2	0'22438	9'12551	3'5436
"	20 - 5'2187	2	0'22223	9'12608	3'5325
July	17 - 5'21010	2	0'22468	9'12470	3'5480
"	18 - 5'2116	2	0'22342	9'12486	3'5423
"	19 - 5'2147	2	0'22290	9'12538	3'5380
August	16 - 5'2218	2	0'22172	9'12378	3'5397
"	17 - 5'2193	2	0'22213	9'12386	3'5411
"	18 - 5'2221	2	0'22162	9'12424	3'5375
September	19 - 5'2285	2	0'22060	9'12375	3'5353
"	20 - 5'2282	2	0'22065	9'12419	3'5378
"	21 - 5'2242	2	0'22132	9'12293	3'5416
October	15 - 5'2349	2	0'21954	9'12332	3'5328
"	17 - 5'2329	2	0'21987	9'12311	3'5338
"	18 - 5'2315	2	0'22010	9'12294	3'5366
November	16 - 5'2343	2	0'21964	9'12270	3'5357
"	17 - 5'2319	2	0'22004	9'12267	3'5371
"	19 - 5'2316	2	0'22009	9'12295	3'5365
December	18 - 5'2396	2	0'21876	9'12223	3'5340
"	19 - 5'2370	2	0'21919	9'12203	3'5366
"	20 - 5'2388	2	0'21890	9'12215	3'5349
1850 :					
January	16 - 5'2390	2	0'21886	9'12222	3'5344
"	17 - 5'2388	2	0'21890	9'12159	3'5372
"	18 - 5'2423	2	0'21831	9'12236	3'5317
February	16 - 5'2450	2	0'21820	9'12197	3'5328
"	18 - 5'2383	2	0'21898	9'12200	3'5358
"	19 - 5'2405	2	0'21867	9'12149	3'5377
March	18 - 5'2379	2	0'21901	9'12181	3'5369
"	19 - 5'2337	2	0'21971	9'12112	3'5425
"	20 - 5'2407	2	0'21858	9'12136	3'5368
April	17 - 5'2409	2	0'21870	9'12121	3'5379
"	18 - 5'2407	2	0'21858	9'12141	3'5366
"	19 - 5'2397	2	0'21875	9'12122	3'5380

HORIZONTAL FORCE IN ABSOLUTE MEASURE.

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TABLE LXXIII.—continued.

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).			
			<i>m</i> X	<i>m</i> X				
1850:								
May	18	-	5°2396	2	0°21876	9°12159	3°5566	} 3°5366
"	20	-	5°2416	2	0°21843	9°12122	3°5368	
"	21	-	5°2410	2	0°21853	9°12140	3°5365	
June	17	-	5°2454	2	0°21780	9°12093	3°5354	} 3°5380
"	18	-	5°2425	2	0°21828	9°11995	3°5414	
"	19	-	5°2491	2	0°21720	9°11981	3°5375	
July	16	-	5°4446	2	0°18512	9°09060	3°5270	} 3°5284
"	17	-	5°4443	2	0°18547	9°09043	3°5280	
"	18	-	5°4479	2	0°18490	9°08928	3°5303	
August	16	-	5°4543	2	0°18388	9°09097	3°5193	} 3°5199
"	17	-	5°4531	2	0°18407	9°09101	3°5200	
"	19	-	5°4492	2	0°18370	9°09149	3°5205	
September	16	-	5°4540	2	0°18393	9°09037	3°5220	} 3°5217
"	17	-	5°4522	2	0°18421	9°09051	3°5226	
"	18	-	5°4534	2	0°18402	9°09077	3°5207	
October	15	-	5°4554	2	0°18370	9°08771	3°5317	} 3°5320
"	16	-	5°4553	2	0°18372	9°08790	3°5311	
"	17	-	5°4508	1	0°18444	9°08782	3°5343	
November	19	-	5°4569	2	0°18347	9°08654	3°5356	} 3°5361
"	20	-	5°4529	2	0°18410	9°08664	3°5378	
"	21	-	5°4530	2	0°18409	9°08734	3°5348	
December	16	-	5°4606	2	0°18288	9°08722	3°5305	} 3°5283
"	17	-	5°4630	2	0°18250	9°08740	3°5282	
"	18	-	5°4667	2	0°18191	9°08733	3°5262	
1851:								
January	15	-	5°4622	2	0°18262	9°08684	3°5310	} 3°5249
"	16	-	5°4772	2	0°18024	9°08748	3°5187	
"	17	-	5°4693	2	0°18150	9°08721	3°5249	
February	17	-	5°4639	2	0°18235	9°08698	3°5330	} 3°5243
"	18	-	5°4768	2	0°18030	9°08751	3°5188	
"	19	-	5°4760	2	0°18043	9°08711	3°5210	
March	17	-	5°4643	2	0°18220	9°08620	3°5322	} 3°5321
"	18	-	5°4626	2	0°18256	9°08697	3°5302	
"	19	-	5°4622	2	0°18262	9°08609	3°5340	
April	15	-	5°4650	2	0°18218	9°08606	3°5323	} 3°5311
"	16	-	5°4652	2	0°18215	9°08593	3°5327	
"	17	-	5°4691	2	0°18153	9°08636	3°5284	
May	15	-	5°4638	2	0°18237	9°08570	3°5345	} 3°5328
"	16	-	5°4627	2	0°18254	9°08596	3°5342	
"	17	-	5°4692	2	0°18151	9°08605	3°5297	
June	17	-	5°4444	2	0°18546	9°08915	3°5331	} 3°5311
"	18	-	5°4501	2	0°18455	9°08868	3°5313	
"	19	-	5°4506	2	0°18447	9°08922	3°5288	
July	15	-	5°4515	2	0°18433	9°08897	3°5292	} 3°5317
"	16	-	5°4490	2	0°18472	9°08838	3°5332	
"	17	-	5°4518	2	0°18428	9°08802	3°5329	
August	15	-	5°4561	2	0°18359	9°08786	3°5308	} 3°5318
"	16	-	5°4547	2	0°18332	9°08851	3°5291	
"	18	-	5°4535	2	0°18401	9°08706	3°5337	

TABLE LXXIII.—*continued.*

Date.	Time of Vibration.	No. of Experiments of Vibration.	Logarithmic Values.		Horizontal Force in absolute Measure (British Units).			
			<i>m</i> X	<i>n</i> X				
1851 :								
September	16	-	5'4611	2	0'18280	9'08730	3'5298	} 3'5286
"	17	-	5'4638	2	0'18237	9'08749	3'5274	
"	18	-	5'4632	2	0'18246	9'08725	3'5287	
October	16	-	5'4660	2	0'18202	9'08640	3'5303	} 3'5311
"	17	-	5'4632	2	0'18246	9'08636	3'5222	
"	18	-	5'4614	2	0'18227	9'08650	3'5309	
November	17	-	5'4861	2	0'17878	9'08352	3'5288	} 3'5304
"	18	-	5'4843	2	0'17912	9'08331	3'5311	
"	19	-	5'4820	2	0'17948	9'08362	3'5313	
December	15	-	5'4860	2	0'17885	9'08340	3'5296	} 3'5286
"	16	-	5'4863	2	0'17880	9'08346	3'5292	
"	18	-	5'4893	2	0'17832	9'08351	3'5270	
1852 :								
January	16	-	5'4886	2	0'17844	9'08271	3'5307	} 3'5305
"	17	-	5'4812	2	0'17960	9'08329	3'5332	
"	19	-	5'4911	2	0'17804	9'08293	3'5276	
February	17	-	5'5062	2	0'17565	9'08146	3'5246	} 3'5231
"	19	-	5'5074	1	0'17546	9'08184	3'5222	
"	23	-	5'5106	2	0'17496	9'08127	3'5225	
"	24	-	5'5105	2	0'17498	9'08127	3'5226	
March	15	-	5'5125	2	0'17466	9'08116	3'5217	} 3'5237
"	16	-	5'5120	2	0'17474	9'08066	3'5240	
"	17	-	5'5097	2	0'17510	9'08095	3'5244	
April	16	-	5'5022	2	0'17628	9'08763	3'5021	} 3'5054
"	17	-	5'4969	2	0'17712	9'08716	3'5071	
"	19	-	5'5005	2	0'17655	9'08676	3'5067	
May	17	-	5'4956	2	0'17733	9'08534	3'5156	} 3'5142
"	18	-	5'4955	2	0'17731	9'08556	3'5148	
"	19	-	5'5003	2	0'17658	9'08566	3'5112	
June	16	-	5'5038	2	0'17603	9'08647	3'5058	} 3'5083
"	17	-	5'5008	2	0'17651	9'08628	3'5084	
"	18	-	5'5023	2	0'17627	9'08551	3'5107	
July	16	-	5'5033	2	0'17611	9'08505	3'5120	} 3'5139
"	17	-	5'5021	2	0'17630	9'08488	3'5133	
"	19	-	5'5022	2	0'17628	9'08462	3'5142	
August	16	-	5'5078	2	0'17540	9'08463	3'5107	} 3'5138
"	17	-	5'5044	2	0'17594	9'08422	3'5145	
"	18	-	5'5018	2	0'17635	9'08463	3'5162	
September	16	-	5'5251	2	0'17268	9'08116	3'5137	} 3'5119
"	17	-	5'5267	2	0'17243	9'08140	3'5117	
"	18	-	5'5262	2	0'17250	9'08185	3'5102	
October	16	-	5'5282	2	0'17219	9'08114	3'5118	} 3'5110
"	18	-	5'5287	2	0'17211	9'08164	3'5095	
"	19	-	5'5283	2	0'17218	9'08118	3'5116	
November	18	-	5'5306	2	0'17181	9'08058	3'5125	} 3'5140
"	19	-	5'5262	2	0'17250	9'08057	3'5154	
"	20	-	5'5286	2	0'17213	9'08016	3'5112	
December	16	-	5'5270	2	0'17238	9'08020	3'5163	} 3'5149
"	17	-	5'5322	2	0'17156	9'07999	3'5139	
"	18	-	5'5303	2	0'17186	9'08016	3'5144	

There is still another correction to be applied to these results, which could not be determined until the return of the Unifilar, at the close of the series, to Woolwich, where in the meantime an apparatus had been prepared for the purpose of ascertaining its amount. The necessity for this correction was first pointed out by Dr. Lamont in Dove's Repertorium, Band 7 (1846). In the experiments for measuring the absolute values of the Horizontal Force two operations are required; viz., experiments of vibration, and experiments of deflection: in the experiments of vibration the magnet is in the magnetic meridian; in those of deflection it forms with that meridian an angle which is in all cases considerable. But as it has been found that the earth elicits a sensible degree of magnetism by induction in hardened and magnetized iron or steel, it follows that when placed in the magnetic meridian a magnet is stronger than when it is perpendicular to or forms an angle with the meridian. In the usual mode of computing the results deducible from the combination of the vibration and deflection experiments, the strength of the magnet which is vibrated in the one case and used as a deflector in the other, is assumed to be the same, which, however, is not strictly true, for the reason which has been assigned; hence the necessity of the correction to which has been given, not inappropriately, the name of the induction-correction. As its value depends on the capacity of the individual magnet to receive a greater or less inductive charge, it requires, like the temperature-correction, to be determined for the particular magnet which has been employed, which in this case was I. 18 throughout the whole series. The apparatus made for this purpose at Woolwich was similar in principle to Dr. Lamont's, described in Dove's Repertorium, Band 7, and was adapted to one of the ordinary portable Unifilars: it has now been transferred to the Kew Observatory, where it will in future be employed to determine this amongst the other constants of the magnetic instruments supplied through that observatory. I am indebted to Mr. Welsh for the following memorandum of the correction to be applied to the Toronto results, which he has determined by using I. 18 in this apparatus.

*Determination of the Induction Coefficient for the Deflecting Magnet I. 18 employed at the Toronto Observatory, 1845—1852.*

The experiments have been made with the Woolwich induction apparatus by the method of Dr. Lamont.

Let  $\mu$  = the magnetic moment induced in the bar by the action of a magnetic force equal to unity of the English measure.

$M$  = moment of permanent magnetism of the bar at the time of making the experiments for the induction coefficient.

$X$ , = horizontal component of the earth's magnetic force at the time and place of the experiments.

$i$  = magnetic dip at the same time and place.

$z$  = angle of deflection produced upon the freely suspended needle, the deflecting bar being placed vertical with the north end *downwards*.

$z'$  = angle of deflection, north end *upwards*.

Then—

$$\frac{\mu}{M_r} = \frac{\tan \frac{1}{2}(z - z')}{X \tan i \tan \frac{1}{2}(z + z')} ; \text{ or, } \mu = \frac{M_r}{X_i} \cdot \frac{\tan \frac{1}{2}(z - z')}{\tan i \tan \frac{1}{2}(z + z')}$$

The effect (in parts of the whole magnetic moment of the bar) of the inducing action of the Horizontal Force at any time and place is obtained from the equation,

$$\frac{\Delta m}{m} = \mu \cdot \frac{X}{m}$$

The following are the results of experiments made at the Kew Observatory, January 17 and 19, 1857:—

	January 17.	January 19.
	° ' "	° ' "
$\frac{1}{2}(z - z')$ =	0 24 38.5	0 31 8.5
$\frac{1}{2}(z + z')$ =	46 50 6.0	52 39 2.0
$i$ =	68 25 0.0	68 25 0.0
Log $\frac{M_r}{X}$ =	8.99790	8.99790
$\mu$ =	0.0002617	0.0002722
Mean value of $\mu$ =	0.0002685	

Hence we have for the different values of  $\frac{m}{X}$  in Table LXXIII., values of  $\frac{\Delta m}{m}$  ranging from 0.00173 to 0.00223; and taking the mean angle of deflection in the Table of the Toronto Observations, Vol. II. pp. 596—633, at  $7^\circ.5$ , the induction-correction applicable to  $X$  varies from  $-0.0035$  in the experiments of 1845 to  $-0.0044$  in those of 1852.

*Kew Observatory, January 20, 1857.*

J. WELSH.



We obtain, therefore, from Table LXXIII, the following finally corrected values of the absolute Horizontal Force in the several years from 1845 to 1852:—

TABLE LXXIV.

Years.	Annual Means From Table LXXIII.	Annual Means corrected for Induction.	Years.	Annual Means From Table LXXIII.	Annual Means corrected for Induction.
1845	3·5478	3·5443	1849	3·5368	3·5328
1846	3·5449	3·5384	1850	3·5322	3·5280
1847	3·5381	3·5342	1851	3·5299	3·5255
1848	3·5339	3·5299	1852	3·5153	3·5110

From the annual means corrected for induction we obtain 3·5305 as the absolute Horizontal Force corresponding to the mean epoch of the table, January 1st 1849; and  $-.00371 = .00091$  as the mean annual secular change between 1845 and 1852 inclusive. The probable error of a single annual mean is  $\pm .0026$ ; a large proportion of which is due to the observations of 1852, which I have not felt at liberty wholly to omit, as no accidental cause has been stated to be known for their apparent irregularity.

## MAGNETIC INCLINATION.

The first volume of the Toronto Observations contained, in pp. 328—332, a detailed statement of the observations of the Inclination made monthly from January 1841 to December 1842 inclusive; the second volume contained, in pp. 559—594, a similar record of the continuation of the series from January 1843 to December 1852 inclusive. The second volume contained also, in pp. lxxxv—lxxxix, a discussion of the results obtained during those years. I have since been favoured by Mr. Kingston, Director of the Toronto Observatory since it has become a provincial establishment, with a continuation of the series during the years 1853, 1854, and 1855, conducted upon the previous model, of which the following is an abstract:—

TABLE LXXV.

Observations of Inclination continued from Vol. II., page 594. Needle employed, Gambey, No. 1.

1853.	75 +	Monthly Means.	1854.	Poles.		Monthly Means.	1855.	Poles.		Monthly Means.		
				Direct, 75 +	Reversed, 75 +			Direct, 75 +	Reversed, 75 +			
Jan. 17	22°1'	75 22°06'	Jan. 16	25°5'	17°1'	75 21°4'	Jan. 15	30°8'	16°4'	75 21°0'		
"	22°0'		"	17	25°0'		18°7'	"	32°5'		15°8'	
"	20°4'		"	17	25°2'		16°6'	"	16		29°0'	18°6'
"	20°3'		"	"	25°2'		16°6'	"	"		28°4'	20°4'
18	22°2'		"	18	25°7'		17°1'	"	17		29°0'	19°1'
"	22°4'		"	"	26°1'		18°1'	"	"		29°1'	19°5'
"	22°9'		"	Feb. 15	30°1'		15°5'	"	Feb. 15		29°1'	17°6'
"	22°4'		"	"	30°2'		17°6'	"	"		29°7'	19°5'
19	22°5'		"	16	29°8'		16°6'	"	16		27°6'	20°1'
"	22°7'		"	"	29°3'		17°5'	"	"		27°2'	20°4'
"	22°4'	"	17	27°8'	18°7'	"	17	28°4'	20°0'			
"	22°5'	"	"	28°5'	19°1'	"	"	27°0'	18°9'			
Feb. 16	23°0'	75 22°6'	Mar. 15	27°3'	18°3'	75 23°1'	Mar. 19	30°9'	18°8'	75 23°8'		
"	22°1'		"	"	25°9'		20°3'	"	20		29°6'	18°1'
"	22°6'		"	16	27°8'		17°4'	"	20		29°4'	17°7'
"	22°8'		"	"	27°2'		19°6'	"	"		28°8'	18°2'
17	23°4'		"	17	27°9'		18°8'	"	21		29°3'	17°4'
"	23°1'		"	"	27°6'		18°5'	"	"		29°7'	17°4'
"	22°0'		"	April 17	27°8'		19°2'	"	April 16		28°4'	18°2'
"	22°6'		"	"	28°0'		18°6'	"	"		28°7'	17°8'
18	21°8'		"	18	28°3'		16°4'	"	17		28°2'	18°2'
"	22°4'		"	"	24°8'		20°3'	"	"		27°6'	18°5'
"	22°8'	"	19	28°2'	18°8'	"	18	27°2'	17°9'			
"	22°6'	"	"	27°9'	17°2'	"	"	28°1'	17°7'			
March -	No observations.	75 22°6'	May 16	27°5'	18°2'	75 23°0'	May 15	28°2'	20°4'	75 23°0'		
April 8	23°0'		"	"	27°3'		18°8'	"	"		26°6'	20°9'
"	22°2'		"	17	27°8'		18°7'	"	16		29°4'	17°0'
"	22°6'		"	"	28°3'		18°1'	"	"		28°8'	19°4'
May -	No observations.		"	18	27°0'		17°7'	"	17		28°7'	16°8'
June 15	23°2'		"	"	26°6'		19°5'	"	"		29°5'	16°6'
"	22°1'		"	June 15	26°1'		18°6'	"	June 18		27°3'	17°3'
"	22°7'		"	"	27°6'		19°2'	"	"		29°4'	16°7'
17	22°0'		"	16	26°7'		19°1'	"	19		27°1'	17°9'
"	22°5'		"	"	26°8'		19°1'	"	"		26°7'	17°7'
July 18	21°6'	75 21°5'	17	25°3'	20°3'	75 22°9'	20	28°1'	19°7'	75 22°9'		
"	21°6'		"	"	28°3'		18°3'	"	"		27°7'	19°3'
"	21°0'		"	July 17	29°4'		17°5'	"	July 16		28°4'	17°9'
19	21°5'		"	"	23°9'		23°1'	"	"		25°6'	20°4'
"	21°7'		"	18	29°1'		19°9'	"	17		27°5'	18°1'
"	21°5'		"	"	29°3'		19°8'	"	"		27°5'	19°1'
Aug. 16	21°0'		"	19	28°0'		20°6'	"	18		27°6'	18°9'
"	20°1'		"	"	27°6'		23°4'	"	"		27°3'	19°1'
17	20°0'		"	Aug. 16	26°2'		21°4'	"	Aug. 15		27°4'	19°6'
"	20°1'		"	"	26°7'		22°4'	"	"		26°6'	19°8'
18	19°9'	75 20°25'	17	26°8'	18°6'	75 23°2'	16	27°5'	20°8'	75 23°8'		
"	20°4'		"	"	26°8'		20°1'	"	"		26°7'	20°7'
Sept. 16	21°4'		"	18	26°3'		17°6'	"	17		28°6'	19°0'
"	20°8'		"	"	25°8'		19°9'	"	"		28°6'	21°1'

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TABLE LXXV.—continued.

1853.	75° +	Monthly Means.	1854.	Poles.		Monthly Means.	1855.	Poles.		Monthly Means.
				Direct, 75° +	Reversed, 75° +			Direct, 75° +	Reversed, 75° +	
Sept. 17	22'1	} 75 21'7	Sept. 18	28'3	18'9	} 75 23'4	Sept. 17	28'4	19'8	} 75 24'5
" 18	21'7		" 18	28'2	19'0		" 18	29'4	19'6	
" 18	21'7		" 19	27'8	20'9		" 19	27'6	21'3	
" 17	22'5	} 75 22'4	" 20	27'2	20'3	} 75 22'0	" 19	26'9	23'9	} 75 23'5
" 17	22'9		" 20	25'9	18'9		" 19	26'1	22'2	
" 18	22'5		" 20	27'0	18'4		" 19	27'5	21'0	
" 18	21'6	} 75 23'0	Oct. 16	26'1	19'2	} 75 22'2	Oct. 15	26'9	19'2	} 75 23'3
" 18	22'9		" 17	25'4	18'7		" 16	30'0	15'4	
" 19	22'1		" 17	26'0	17'7		" 16	27'6	19'5	
" 19	22'7	} 75 22'3	" 18	25'2	20'0	} 75 22'2	" 17	26'7	22'0	} 75 23'3
*Nov. 16	22'2		" 18	26'0	16'0		" 17	27'9	19'7	
" 17	23'0		" 18	26'3	16'9		" 17	27'2	19'8	
" 17	23'2	} 75 22'3	Nov. 16	24'1	17'9	} 75 23'9	Nov. 13	28'7	18'9	} 75 23'3
" 18	23'2		" 17	28'0	16'1		" 16	26'3	19'8	
" 18	23'2		" 17	26'9	17'6		" 16	26'5	20'7	
Dec. 15	23'2	} 75 22'3	" 18	28'4	17'4	} 75 23'0	" 16	26'5	19'4	} 75 23'3
" 15	22'5		" 18	26'9	17'3		" 17	26'2	19'3	
" 16	21'7		" 18	27'1	18'2		" 17	26'8	19'9	
" 16	22'6	} 75 23'0	Dec. 18	31'0	15'4	} 75 23'9	Dec. 18	27'4	19'9	} 75 23'3
" 17	21'8		" 19	30'8	16'1		" 19	27'9	20'9	
" 17	22'5		" 20	28'3	19'4		" 19	27'5	17'3	
" 17	22'5	} 75 23'0	" 20	33'1	17'7	} 75 23'9	" 20	26'9	18'9	} 75 23'3
" 17	22'5		" 20	28'7	18'3		" 20	25'9	20'0	
" 17	23'0		" 20	30'0	17'9		" 20	27'2	19'5	

The annual means are 75° 22'17, 75° 23'0, and 75° 23'55. Collecting the several annual means into one view, we have the following table:—

TABLE LXXVI.

Years.	Observed Inclination.	Years.	Observed Inclination.	Years.	Observed Inclination.
1841	75° 16'6	1846	75° 15'1	1851	75° 20'4
1842	75 16'4	1847	75 15'3	1852	75 20'5
1843	75 14'7	1848	75 18'3	1853	75 22'2
1844	75 14'8	1849	75 18'8	1854	75 23'0
1845	75 15'5	1850	75 20'0	1855	75 23'6

\* Previous to the observations of November 1853 a new stone pillar was substituted for the original wooden one.

From these observations the Inclination appears to have reached an epoch of minimum between the years 1843 and 1844, or about the commencement of 1844; and from 1844 to 1855 to have increased at an average rate of  $\frac{75^{\circ} 23' \cdot 6 - 75^{\circ} 14' \cdot 8}{11} = 0' \cdot 8$ . On this supposition we have the computed Inclination in each of the twelve years, with the deviations from the observed values, as follows:—

TABLE LXXVII.

Years.	Computed Inclination.	Computed—observed.	Years.	Computed Inclination.	Computed—observed.
1844	$75^{\circ} 14' \cdot 8$	0'0	1850	$75^{\circ} 19' \cdot 6$	-0'4
1845	$75^{\circ} 15' \cdot 6$	+0'1	1851	$75^{\circ} 20' \cdot 4$	-0'0
1846	$75^{\circ} 16' \cdot 4$	+1'3	1852	$75^{\circ} 21' \cdot 2$	+0'7
1847	$75^{\circ} 17' \cdot 2$	+1'9	1853	$75^{\circ} 22' \cdot 0$	-0'2
1848	$75^{\circ} 18' \cdot 0$	-0'3	1854	$75^{\circ} 22' \cdot 8$	-0'2
1849	$75^{\circ} 18' \cdot 8$	-0'0	1855	$75^{\circ} 23' \cdot 6$	-0'0

The probable error of a single annual determination computed from these twelve years is  $\pm 0' \cdot 5$ .

If we further suppose the epoch of minimum to have synchronized with the commencement of 1844, and that the same rate of secular change, but with an opposite sign, existed previously, we shall have the annual means for the three preceding years, with their deviations from the observed values, as follows:—

1841	-	-	$75^{\circ} 16' \cdot 3$	Computed—observed	- 0'3	
1842	-	-	$75^{\circ} 15' \cdot 5$	„	„	- 0'9
1843	-	-	$75^{\circ} 14' \cdot 7$	„	„	0'0

This last supposition must of course be viewed as merely approximate in regard to the *rate* of the secular change before 1843; but on any other supposition than that of an epoch of minimum having occurred somewhere about the years 1843 and 1844, the probable error would greatly exceed that which is stated above. The value of the Inclination at the epoch of its supposed minimum is about  $75^{\circ} 14' \cdot 4$ . In the years immediately following the minimum, the annual increase was probably less, and in the latter portion of the twelve years greater, than the average rate of  $0' \cdot 8$  derived as above.

The Gambey's Inclinometer which has been used at Toronto since 1853 is rather a remarkable instrument, on account of the services it has rendered. It

is the property of Admiral Robert FitzRoy, who, when about to be employed on a voyage of survey and circumnavigation in H.M.S. "Beagle," purchased it from the maker. During that voyage, *i.e.* from 1831 to 1836 inclusive, it served for the determination of the Inclination at above 30 stations in different parts of the globe, the results of which were published in Vol. I. of the "Voyage of the 'Adventure' and 'Beagle,'" pp. 495—499. In 1837 it was lent by Captain FitzRoy to the writer of these pages, to be employed in determining the position and direction of the isoclinal lines in the magnetic survey of Great Britain, the report of which survey is published in the Transactions of the British Association for 1839. In 1842 it was again lent by Captain FitzRoy to Lieutenant (since Lieutenant-Colonel) Lefroy of the Royal Artillery, to be used in the magnetic survey of the British Possessions in North America, and served to determine the Inclination at above 100 stations between Canada and the Polar Sea. Since the completion of the North American Survey the Inclinator has remained, with Captain FitzRoy's permission, at the Toronto Observatory, and was occasionally used, in conjunction with Robinson's Inclinator belonging to the Observatory, in the observations previous to 1853; since 1853 it has been used uninterruptedly. It had originally two needles made by Gambey, and has since had two others, made by the late Mr. Robinson, whose dipping needles were scarcely, if at all, inferior to Gambey's. It has thus been, with few intermissions, in constant work for above a quarter of a century, during which time it has been exposed to travelling of all descriptions, and to climates of the most opposite character; and of its four needles one only is known to have suffered a slight deterioration. This speaks well both for the original instrument and for the care with which it has been treated. The observations in 1853, 1854, and 1855, of which the results only are given in Table LXXV., were all made on the same systematic plan as those of the preceding years, detailed in Vol. II., pp. 560—594, and may be referred to as a fair example of the precision which is attainable in such observations.

*Solar-diurnal Variation.*—In the early stage of the observations, and before experience had been obtained of the reliance to be placed on the conclusions from the combined Horizontal and Vertical Force observations, it was thought that some light might be thrown upon the solar-diurnal variation of the Inclination by dividing the *direct* observations of this element into two portions, one to be made in the forenoon and the other in the afternoon. We have since become aware that the solar-diurnal variation of the Inclination is deducible by the Horizontal Force and Vertical Force Magnetometer with much greater precision than it can be by direct observation with the Inclinator, and that the variation is thereby obtained not merely for two epochs in the 24 hours, such as the forenoon and afternoon, but for every hour of the 24. (See *ante*, p. xciii.) Still, as direct observations were made in the forenoons and

afternoons, agreeably to the directions issued, and were continued from the commencement of 1841 to the end of 1852, it may be proper to show the comparative results which were thus obtained in each year. They are as follow:—

TABLE LXXVIII.

Years.	A.M.	P.M.	Years.	A.M.	P.M.
1841	75° 16' 68"	75° 17' 20"	1847	75° 15' 43"	75° 15' 27"
1842	75° 16' 91"	75° 15' 69"	1848	75° 18' 23"	75° 18' 44"
1843	75° 15' 15"	75° 14' 35"	1849	75° 19' 14"	75° 18' 70"
1844	75° 15' 33"	75° 14' 31"	1850	75° 19' 90"	75° 20' 09"
1845	75° 15' 31"	75° 15' 76"	1851	75° 20' 27"	75° 20' 44"
1846	75° 15' 21"	75° 15' 09"	1852	75° 20' 56"	75° 20' 47"

The mean of the A.M. results is  $75^{\circ} 17' 35''$ , and of the P.M. results  $75^{\circ} 17' 15''$ . On the average of the 12 years the A.M. results exceed the P.M. by  $0' 2''$ . This is in the same direction as, but somewhat less in amount than, the difference more satisfactorily shown by the combination of the Horizontal and Vertical Force observations. If we suppose 9 A.M. and 3 P.M. to be about the mean times corresponding to the A.M. and P.M. direct observations, the difference between them should have been nearer  $0' 5''$  than  $0' 2''$ ; but a discrepancy of this small amount is within the limits of the errors of observation by the direct method.

*Annual Variation.*—Table L. in Vol. II., p. lxxxvii, contains the several monthly values of the Inclination from 1841 to 1852 inclusive, arranged according to the respective months. The following Table (LXXIX.) contains the continuation of the aforesaid Table in Vol. II., for the subsequent years 1853, 1854, and 1855: the final column exhibits for each month a value which is the arithmetical mean of the results in that month in the 15 years.

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TABLE LXXIX.

Monthly Means of the Observations of the Inclination from January 1841 to December 1855 inclusive, continued from TABLE L, Vol. II., p. lxxxvii.

Months.	1853.	1854.	1855.	Means for each Month, 1841 to 1855 inclusive.
	75° +	75° +	75° +	
January - - -	22'1	21'4	21'0	75° 18'78
February - - -	22'6	23'4	23'8	75 18'43
March - - -	22'6*	23'1	23'8	75 18'17
April - - -	22'6	23'0	23'0	75 18'33
May - - -	22'5*	23'0	23'5	75 18'08
June - - -	22'5	22'9	22'9	75 17'38
July - - -	21'5	21'3	23'1	75 17'13
August - - -	20'3	23'2	23'8	75 17'33
September - -	21'7	23'4	21'5	75 19'09
October - - -	22'5	22'0	23'5	75 19'09
November - -	23'0	22'2	23'3	75 19'53
December - -	22'3	23'9	23'3	75 19'15
Means for each year -	75 22'2	75 23'0	75 23'6	75 18'38

\* The months of March and May of 1853 are interpolated values, as no observations were made in those months. For March, a mean has been taken between the results in February and April of the same year; and for May, a mean between the results in April and June.

On examining the final column, the existence of annual variation is very perceptible: the Inclination is considerably less in the middle months of the year than at its beginning or ending. But these results involve the effects of the secular change which takes place during the year, as well as those of annual variation. To eliminate the influence of secular change, perhaps the least exceptionable process is to take the arithmetical means, respectively, of January and December, February and November, March and October, April and September, May and August, June and July, of all which couples, or bi-monthly means, the 1st of July is the common mean epoch; if, therefore, there were no annual variation, these six means should be all alike. They are as follow:—

January and December	- - -	75 18'96
February and November	- - -	75 18'98
March and October	- - -	75 18'63
April and September	- - -	75 18'71
May and August	- - -	75 17'70
June and July	- - -	75 17'25

It appears therefore, as the result of fifteen years of careful observations, made throughout at the same spot, and according to the same systematic method, and comprising no less than 1,920 distinct absolute determinations, nearly equally distributed, and averaging, therefore, 128 for each of the twelve months,—and after the elimination of secular change,—that the Inclination is lower at Toronto in June and July than in the preceding January and the succeeding December, by an amount which may be taken approximately at 1'71.

*Annual Variation, Absolute Value, and Secular Change of the Total Force.*—The mean values of the absolute Horizontal Force in the different months obtained in the eight years (1845 to 1852 inclusive, pp. cvi—cxv) are as follow:—

January	3'5326;	December	3'5291;	Mean, January and December	3'5309.
February	3'5310;	November	3'5287;	Mean, February and November	3'5299.
March	- 3'5329;	October	- 3'5278;	Mean, March and October	- 3'5303.
April	- 3'5296;	September	3'5276;	Mean, April and September	- 3'5286.
May	- 3'5324;	August	- 3'5298;	Mean, May and August	- 3'5311.
June	- 3'5323;	July	- 3'5318;	Mean, June and July	- 3'5321.

Combining these with the mean values of the Inclination in the different months in the preceding page, we have the values of the Total Force as follow:—

January and December	3'5309 × sec 75° 18'96 = 13'9133	} 13'9191
February and November	3'5299 × sec 75° 18'98 = 13'9254	
March and October	- 3'5303 × sec 75° 18'63 = 13'9218	} 13'9191
April and September	- 3'5286 × sec 75° 18'71 = 13'9164	
May and August	- 3'5311 × sec 75° 17'70 = 13'9106	} 13'9091
June and July	- 3'5321 × sec 75° 17'25 = 13'9076	

It appears therefore, as the result of 96 monthly determinations of the absolute Horizontal Force, and 180 monthly determinations of the Inclination, that the Total Magnetic Force is less at Toronto on the average of the months of June, July, August, and September, than on the average of the months of November, December, January, and February, by 0'01 in absolute measure, or about  $\frac{1}{1150}$  of its whole amount.

The mean of the eight years of observation of the absolute Horizontal Force (p. cxvii) is 3'53045, corresponding to the mean epoch of January 1, 1849; the contemporaneous value of the Inclination is 75° 18'4; whence we have 13'9188 as the absolute value of the Total Force at the same mean epoch. Or if, as some may deem preferable, we omit the observations of the Horizontal Force in 1852, which, from some unexplained cause, differ from the results of the preceding seven years by an amount which greatly exceeds the probable error of a single year as derived from those results, we have, at the mean epoch July 1, 1848,—for the absolute Horizontal Force 3'5332; for the Inclination (the mean of the same seven years) 75° 17'63; and for the Total Force 13'9178. With the data furnished by the observations of those seven years, we have



the annual secular decrease of the Horizontal Force  $\cdot 0026 \pm \cdot 0006$ ; and the secular increase of the Inclination  $1' \cdot 0 \pm 0' \cdot 19$ ; the probable error of a single annual determination of the absolute Horizontal Force  $\pm \cdot 0015$ , and of the Inclination  $0' \cdot 51$ ; and with the same data we obtain the absolute values of the Total Force, corresponding to July 1, 1845,  $13 \cdot 9023$ , and corresponding to July 1, 1851,  $13 \cdot 9334$ ; showing intermediately an increase of  $0 \cdot 0311$  in six years, or  $\cdot 0052$  in one year. Both combinations, therefore, *i.e.* the Horizontal and Vertical Forces examined in pp. ciii—civ, and the Horizontal Force and Inclination examined here, concur in showing an annual increase as the secular change of the Total Force; and we may view the two combinations as being in effect very nearly equivalent to two independent determinations; because, although it is true that the secular change of the Horizontal Force enters into both, yet in its combination with that of the Vertical Force, no variation in its amount which can be regarded as in any degree probable could be otherwise than insignificant in the deduction of the resulting secular change of the Total Force.

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SECULAR CHANGE OF THE MAGNETIC DECLINATION.

Volume II. of the Toronto Observations contains, in pp. 635—639, the particulars of the monthly observations, made from 1845 to 1851 inclusive, to determine the absolute values of the Declination by means of a Declinometer placed in a detached building appropriated to that object only. An abstract of these observations, with a statement of their results, is given in Table I. at the commencement of the same volume (pp. iii, iv); and the conclusion from the results in p. vi. The value of the Declination at the mean epoch July 1, 1848, is stated to have been  $1^{\circ} 34' \cdot 91$  West; and the mean annual increase of West Declination between 1845 and 1851,  $1' \cdot 952$ .

I have since received, through the kindness of Mr. Kingston, the present Director of the Toronto Observatory, a continuation of the series made at intervals in the years 1853 and 1854, with the same instrument in the same locality; and the commencement of a new series in 1855, with the Declinometer placed in a new building. The results are contained in the following table.

TABLE LXXX.

Dates.	Mean Observed Declination.	Mean Reading of the Observatory Declinometer.	Mean Monthly Reading of the Observatory Declinometer.	Differences, $\alpha - \beta$ .		Observed Declination reduced to the Mean Monthly Reading of the Observatory Declinometer.
				Sec. Div.	Arc.	
1853:	$^{\circ}$ $'$	$^{\circ}$ $'$	$^{\circ}$ $'$	$^{\circ}$ $'$	$^{\circ}$ $'$	
July 28, 29, and 30	- 1 48'6	349'1	355'7	-6	-4'7	1 43'8 W.
August 24, 25, and 26	- 1 51'1	350'0	355'3	-5'3	-3'8	1 47'3
1854:						
January 21 to 27	- 1 52'0	350'4	351'9	-1'5	-1'1	1 50'9
February 23 to 28	- 1 46'6	348'9	351'1	-2'1	-1'5	1 45'0
March 24 to 30	- 1 51'7	345'9	350'2	-4'3	-3'1	1 48'6
April 25 to 27	- 1 52'4	342'8	350'1	-7'2	-5'2	1 47'3
June 22 to 24	- 1 51'5	344'6	350'2	-5'6	-4'0	1 47'3
New Series commenced after rebuilding the Observatory.						
1855:						
August 24	- 1 56'7	369'2	376'7	-7'6	-5'4	1 51'3
September 20	- 1 51'2	373'5	377'5	-4'0	-2'9	1 51'3
October 16 and 17	- 1 55'5	372'8	375'8	-3'0	-2'1	1 53'4
November 16	- 1 58'8	370'6	375'6	-5'0	-3'6	1 55'2
December 17 and 18	- 1 56'6	373'6	375'4	-1'8	-1'3	1 55'3

The annual secular change from 1815 to 1851 inclusive is an increase of 1'95 West Declination; from July 1851 to April 1854 (two years and nine months), an increase of 2'54; and, assuming the circumstances of the new series to be strictly comparable with those of the old series, the increase from April 1854 to October 1855 is at the mean annual rate of 3'4. It seems probable, therefore, that the rate of the secular increase of West Declination at Toronto is augmenting.

Captain Younghusband, R.A., who had been Director of the Toronto Observatory from 1841 to 1844 inclusive, and who had subsequently held the appointment of my Assistant at Woolwich, was recalled in January 1854 to regimental duty, from which he had been detached for more than twelve years. Since that date I have had no other assistance than that which I have received from Mr. Magrath, Principal Clerk, and

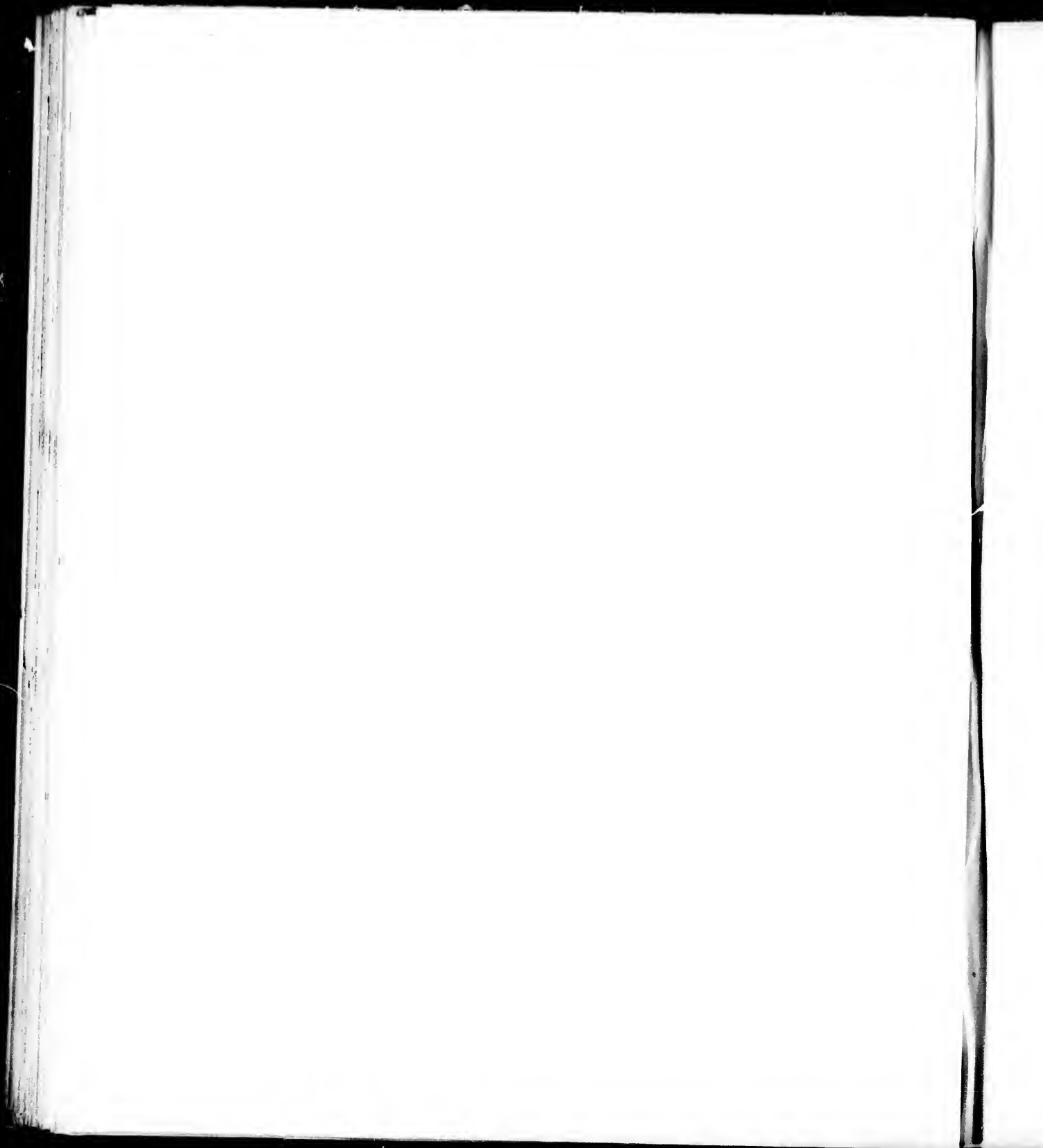
four non-commissioned officers of the Royal Artillery, acting as Assistant Clerks, who are changed occasionally as military convenience requires.

The long experience which Mr. M'grath has had in the office in which he has served since its commencement in 1840, and his unwearied assiduity and devotion, together with the uniform good conduct of the non-commissioned officers, have enabled me to carry on the duties since December 1853 without requiring the assistance of an officer.

EDWARD SABINE,  
Major-General.

*Woolwich, March 1857.*

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TORONTO, 1846 to 1848.

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MAGNETICAL OBSERVATIONS.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JANUARY.	1	115°7	114°6	118°8	119°0	119°0	116°2	112°4	109°0	109°4	111°0	112°7	113°4
	2	114°5	114°8	114°8	118°0	116°1	113°2	111°0	110°8	112°0	112°4	112°6	114°1
	3	114°8	114°0	115°8	116°0	116°6	114°9	113°6	111°0	110°8	108°5	112°5	114°2
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	114°0	114°1	117°8	118°7	117°0	114°8	111°6	110°0	111°1	111°0	111°4	110°2
	6	115°6	115°8	117°0	119°2	117°7	110°3	111°0	109°0	110°0	111°2	112°4	114°0
	7	111°8	116°7	117°0	117°3	113°2	113°8	104°8	105°2	111°2	109°7	114°0	113°9
	8	117°8	114°0	114°8	117°0	116°2	115°0	111°4	109°8	111°4	112°2	113°5	115°0
	9	115°7	116°2	118°0	117°4	116°5	113°8	111°4	110°4	111°6	112°2	113°2	114°0
	10	116°0	116°1	117°3	118°4	115°6	113°0	111°8	112°0	112°1	113°0	112°9	118°2
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	112°2	114°1	110°0	109°4	116°0	115°0	113°0	111°2	109°7	110°0	111°9	117°8
	13	114°3	116°3	118°0	117°4	116°6	114°9	111°4	113°5	113°6	110°4	110°5	111°8
	14	110°4	102°9	115°1	119°1	118°0	115°0	114°2	114°0	111°3	111°2	118°3	114°0
	15	113°8	114°5	111°4	118°8	115°9	113°2	112°1	113°2	113°0	112°1	112°4	112°8
	16	111°0	115°4	120°8	120°7	116°9	115°8	111°0	112°2	110°0	109°0	112°0	111°3
	17	119°0	117°7	120°4	119°4	115°4	115°2	110°4	108°4	107°5	107°6	112°7	117°1
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	115°7	116°2	118°0	119°0	118°8	115°1	112°0	109°2	112°0	112°2	113°0	114°4
	20	116°8	117°8	118°2	119°0	116°4	113°2	110°2	110°5	111°4	114°7	114°1	114°0
	21	116°0	116°4	119°2	119°8	118°8	116°2	110°4	107°0	105°9	109°5	113°0	114°4
	22	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	108°0	110°4	113°2	118°5
	23	116°2	117°2	119°8	120°0	118°7	116°0	111°7	107°9	108°4	112°1	112°3	112°4
	24	116°8	121°7	121°2	119°0	118°4	114°1	110°0	104°5	109°5	112°0	111°2	115°5
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	117°0	116°8	119°0	120°0	117°2	113°4	111°0	108°3	109°4	111°0	112°3	112°2
	27	115°2	115°4	119°0	116°8	112°9	108°8	108°9	107°2	108°0	112°4	114°2	114°3
	28	119°8	117°0	120°4	113°8	110°6	106°2	109°0	109°4	110°2	111°6	114°0	114°2
	29	117°0	117°3	119°5	119°0	117°6	113°8	111°8	110°2	111°1	111°8	112°8	113°0
	30	116°3	117°7	120°0	118°7	117°0	113°0	108°7	107°2	107°2	108°0	110°7	112°8
	31	116°0	118°8	120°8	120°2	116°8	114°1	110°0	108°0	109°2	110°8	113°2	114°0
February 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	115°46	115°89	117°97	118°22	116°63	113°86	111°23	109°55	110°26	111°07	112°85	114°13	
FEBRUARY.	2	117°2	111°2	117°0	115°4	117°0	115°1	112°2	109°9	109°4	109°0	111°0	116°2
	3	113°2	117°4	120°4	120°8	117°3	117°6	113°8	109°2	109°6	110°0	111°7	112°2
	4	115°2	117°8	117°8	118°2	113°9	113°5	112°0	109°8	107°8	108°0	110°3	112°2
	5	114°9	114°4	116°8	115°8	116°2	113°0	111°8	110°2	110°0	111°4	112°0	112°2
	6	115°0	115°6	117°0	117°0	117°0	115°0	113°0	111°8	111°2	112°0	112°2	112°4
	7	116°4	115°0	116°0	117°2	114°8	110°0	108°0	108°2	109°5	110°4	112°7	112°1
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	118°4	116°4	115°8	80°4	107°0	111°0	110°0	110°0	110°7	112°2	113°1	113°0
	10	114°2	114°2	118°3	117°4	113°9	111°7	108°0	107°8	109°7	112°6	113°6	114°0
	11	114°0	111°3	116°0	116°5	113°4	111°7	110°8	110°2	110°4	112°0	114°0	114°0
	12	114°1	116°0	120°0	117°0	113°3	111°2	109°2	108°8	110°0	110°2	111°4	113°0
	13	116°0	116°5	118°0	116°8	113°8	111°3	109°2	108°5	109°0	109°8	111°8	111°2
	14	120°3	120°8	122°1	118°9	116°2	112°5	109°0	107°0	108°0	108°2	110°0	109°2
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	109°8	115°0	113°2	114°8	113°8	112°6	111°4	108°6	110°8	111°2	110°0	115°0
	17	115°0	116°0	116°0	115°7	116°1	114°0	109°0	109°2	108°0	111°0	112°4	110°0
	18	114°3	116°2	118°0	114°7	117°2	116°2	114°4	111°4	108°8	109°0	113°8	109°3
	19	115°0	115°8	117°0	117°0	115°6	114°9	114°2	112°4	112°0	113°0	113°2	111°9
	20	115°3	116°2	117°0	117°0	115°1	112°2	110°0	110°0	110°2	112°0	112°0	110°6
	21	115°2	116°2	117°0	116°0	114°1	110°3	110°0	111°0	111°0	110°0	110°0	109°6
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	116°0	116°0	115°8	115°0	114°0	112°9	111°8	111°2	111°2	111°0	110°8	111°0
	24	116°7	117°0	118°7	118°0	114°8	111°0	110°2	110°2	109°8	110°8	112°0	111°5
	25	116°2	116°8	118°2	117°1	116°2	113°4	107°0	103°7	104°8	103°8	104°0	102°2
	26	117°8	119°8	120°0	117°2	110°3	111°2	108°8	107°2	106°0	109°2	112°4	113°0
	27	117°5	118°8	119°4	118°8	118°1	115°0	111°4	110°0	108°1	110°0	110°8	112°8
	28	116°6	119°0	121°0	120°6	117°2	111°2	108°0	107°0	107°5	109°3	112°0	112°2
	March 1	—	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	115°60	116°35	117°77	115°55	114°85	112°85	110°55	109°30	109°31	110°38	111°54	111°70



DECLINATION.													12h.	
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.														
Mean Göttingen } Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	Sc. Div.	
MARCH.	2	115°0	117°6	121°0	118°0	114°0	112°6	110°2	107°8	107°8	108°4	109°2	111°7	111°4
	3	116°0	118°2	120°0	117°8	116°2	109°4	108°5	109°6	109°0	108°8	111°0	112°5	112°2
	4	115°4	116°2	118°4	117°5	116°4	109°5	108°6	107°2	107°1	108°2	110°1	110°5	112°1
	5	116°2	116°0	118°8	113°9	116°4	116°3	114°0	112°0	111°6	111°2	111°5	112°0	112°0
	6	116°1	118°7	119°0	119°0	118°0	114°8	111°8	110°0	109°4	110°8	112°2	113°0	112°8
	7	116°0	119°2	121°2	121°4	119°0	115°8	111°8	109°2	107°8	108°0	108°8	110°8	111°0
	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	9	115°0	118°2	118°6	120°0	118°1	114°4	109°8	108°8	108°6	109°0	110°9	112°0	112°2
	10	116°0	117°2	119°7	119°7	117°4	111°3	106°4	104°0	105°1	106°8	109°0	112°0	112°8
	11	116°2	118°8	118°7	119°7	115°6	111°9	109°1	108°3	106°3	101°9	107°8	110°6	112°2
	12	118°2	121°4	122°4	118°4	116°1	110°2	107°0	106°0	105°8	108°4	111°6	112°6	110°6
	13	118°0	112°2	101°2	106°2	99°0	97°4	101°2	101°4	105°4	105°0	105°1	98°8	104°0
	14	124°2	120°8	111°0	111°4	112°9	105°5	103°9	100°6	106°8	106°0	113°2	119°0	118°2
	15	—	—	—	—	—	—	—	—	—	—	—	—	—
	16	116°8	118°2	119°2	120°2	116°8	110°8	105°2	103°8	103°0	100°0	112°4	102°1	108°0
	17	116°2	100°4	105°2	115°6	119°4	112°3	106°9	105°0	105°0	106°2	120°0	111°2	112°0
	18	102°2	114°0	118°8	121°3	117°0	113°5	110°9	107°4	107°4	108°2	108°9	111°2	112°2
	19	115°0	117°6	120°2	118°2	118°1	114°0	110°1	108°2	107°0	107°3	109°6	113°0	112°0
	20	116°0	117°0	121°2	123°8	120°9	115°1	110°7	106°0	104°7	104°3	105°8	108°0	110°8
	21	116°4	118°8	118°8	120°2	114°2	110°7	107°7	105°0	103°0	102°2	105°2	108°9	111°2
	22	—	—	—	—	—	—	—	—	—	—	—	—	—
	23	116°5	119°0	120°2	119°8	115°5	110°8	108°0	104°0	106°0	107°2	109°8	111°0	111°0
	24	118°5	119°2	120°8	122°6	116°9	108°4	103°2	101°0	102°2	104°4	108°8	110°4	111°0
	25	115°2	116°8	119°1	118°8	119°0	114°0	108°8	106°2	104°4	106°2	109°6	110°7	111°4
	26	97°4	116°2	123°4	116°4	116°3	110°4	108°2	104°9	105°1	105°9	110°0	110°4	113°0
	27	119°2	119°2	120°6	121°0	113°6	111°2	109°8	106°0	106°2	107°5	108°9	111°4	114°4
	28	116°3	115°2	120°6	122°3	116°2	114°4	110°2	107°6	105°3	105°7	107°3	109°2	113°2
	29	—	—	—	—	—	—	—	—	—	—	—	—	—
	30	111°8	115°2	122°4	124°1	118°4	113°6	109°6	105°2	103°8	104°4	107°0	110°4	111°8
	31	117°4	119°4	119°6	119°0	116°8	110°4	107°4	105°0	105°2	105°4	106°8	110°2	113°0
	Hourly Means	115°39	116°95	118°47	118°70	116°08	111°49	108°43	106°35	106°12	106°44	109°63	110°52	111°79
APRIL.	1	112°6	115°8	119°4	120°4	117°6	111°8	107°2	105°6	106°6	106°1	106°6	107°6	110°0
	2	117°4	117°6	114°4	114°2	117°3	113°6	110°4	107°0	107°2	107°0	107°5	109°0	110°3
	3	118°7	121°2	122°8	122°0	117°2	112°8	108°0	105°0	102°8	105°7	107°3	110°4	112°0
	4	118°0	121°0	122°8	121°3	118°8	114°5	102°0	100°0	103°0	104°0	105°2	109°2	111°6
	5	—	—	—	—	—	—	—	—	—	—	—	—	—
	6	111°0	97°0	81°0	92°7	115°0	115°0	108°4	107°9	105°2	102°0	110°5	95°0	120°7
	7	119°0	117°4	117°2	119°2	113°0	108°8	107°2	105°0	106°9	105°2	106°2	108°0	113°0
	8	117°0	117°2	114°1	116°2	112°5	107°1	105°0	104°1	106°4	106°9	108°8	111°9	112°0
	9	117°0	119°0	119°8	117°6	113°7	107°8	104°5	102°5	103°0	105°3	107°2	111°0	113°4
	10 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
	11	119°8	118°0	117°2	118°8	114°1	108°0	110°6	105°4	105°6	106°8	109°9	114°9	113°3
	12	—	—	—	—	—	—	—	—	—	—	—	—	—
	13	108°2	118°6	115°0	109°0	112°0	110°4	101°7	100°0	102°4	102°0	107°0	105°2	106°4
	14	117°4	107°0	108°0	116°7	116°2	110°0	106°9	103°2	102°0	99°7	102°2	103°0	107°2
	15	122°2	123°2	124°7	121°8	113°1	110°3	108°0	106°8	103°0	105°4	102°2	103°0	103°8
	16	112°6	117°2	117°8	113°3	106°4	103°4	98°4	101°0	106°6	102°2	116°6	108°0	107°4
	17	118°0	120°2	121°0	111°0	114°3	113°0	108°6	105°1	106°8	105°7	108°6	107°0	109°8
	18	117°0	118°8	118°2	119°2	114°7	110°2	106°6	105°0	104°2	102°8	105°7	107°5	110°0
	19	—	—	—	—	—	—	—	—	—	—	—	—	—
	20	114°0	117°0	117°0	116°9	114°0	110°0	107°8	107°0	105°7	106°5	106°1	108°3	108°0
	21	119°0	121°0	122°2	120°0	116°0	109°2	106°9 <sup>b</sup>	103°2 <sup>c</sup>	103°7	105°0	107°7	110°0	113°2
	22	119°6	121°0	122°7	119°0	115°2	108°0	111°2	102°4	100°8	103°8	108°9	111°9	111°9
	23	118°8	119°4	120°8	116°8	111°7	105°8	102°3	101°2	103°2	104°9	106°8	109°0	110°0
	24	116°4	118°6	118°4	117°0	115°7	107°4	106°2	105°2	101°0	106°2	109°5	113°0	113°9
	25	118°2	123°0	122°2	118°3	113°2	109°0	107°0	103°0	104°0	102°0	108°0	110°0	115°4
	26	—	—	—	—	—	—	—	—	—	—	—	—	—
	27	117°8	119°0	118°2	117°2	106°7	107°0	105°2	106°4	106°2	108°0	109°8	112°0	113°6
	28	119°0	120°0	119°2	114°2	110°2	106°4	106°0	106°4	106°2	107°0	107°9	110°0	111°9
	29	118°7	121°6	120°8	121°4	115°6	111°4	106°0	106°0	106°2	106°4	107°2	109°8	113°2
	30	121°4	120°8	119°7	114°4	110°9	107°4	103°0	102°8	105°0	108°0	109°7	109°8	110°6
Hourly Means	117°15	118°02	117°38	116°35	113°80	109°53	106°32	104°41	104°67	104°98	107°76	108°58	111°30	

<sup>a</sup> Good Friday.

<sup>b</sup> Two minutes late.

<sup>c</sup> Three minutes late.



DECLINATION.  
Angular Value of one Scale Division of the Declinometer = 0".724. Increasing Numbers denote decreasing Westerly Declination.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
111°4	111°9	113°1	113°1	113°8	113°7	114°2	113°8	113°8	114°0	114°8	114°2	113°13
112°2	112°8	113°0	113°0	113°9	114°0	118°2	114°2	112°6	116°2	116°4	116°8	113°76
112°1	112°2	112°9	113°3	114°0 <sup>a</sup>	119°8	116°0	115°2	113°2	112°8	112°0	116°4	113°12
112°0	112°2	113°0	113°4	113°0	115°2	114°8	115°2	115°0	110°0	117°0	116°0	114°03
112°8	112°8	113°0	113°3	113°8	114°0	114°0	113°9	114°1	114°1	115°4	116°0	114°17
111°0	114°5	113°1	113°7	113°9	114°0	—	—	—	—	—	—	113°82
112°2	113°1	113°9	113°9	114°0	114°4	113°2	113°3	113°3	114°1	114°2	114°4	113°99
112°8	113°0	114°3	113°2	114°0	112°7	113°0	114°0	116°0	116°2	115°7	115°0	112°97
112°2	113°8	113°6	115°0	114°8	116°8	119°8	117°2	115°3	115°8	116°2	116°8	113°84
110°6	111°4	113°8	115°0	117°2	115°0	114°8	114°9	114°9	112°2	118°2	119°3	113°98
104°0	111°1	111°5	117°1	117°5	116°2	116°4	124°7	126°0	118°1	116°0	115°5	110°33
118°2	113°9	120°8	139°0	117°0	115°8	—	—	—	—	—	—	114°22
108°0	123°7	108°0	112°8	119°8	125°8	111°4	113°7	113°0	113°2	114°7	115°4	113°87
112°0	120°2	130°0	126°8	120°2	118°8	122°2	113°2	121°8	115°2	113°0	116°8	111°75
112°2	126°6	110°1	112°8	113°0	113°2	113°9	114°0	114°0	114°8	115°0	114°2	113°11
112°0	113°0	112°8	114°9	113°4	114°0	114°0	111°0	114°6	114°3	114°0	115°6	113°55
110°8	111°8	112°0	113°0	113°0	113°9	115°4	115°2	114°6	118°2	117°3	116°0	113°45
111°2	111°5	112°5	112°4	112°8	113°0	—	—	—	—	—	—	112°20
111°0	111°7	112°6	112°6	113°0	113°0	114°6	114°1	115°8	113°8	115°0	115°0	113°26
111°0	112°1	112°1	112°0	112°3	112°8	113°4	113°7	114°0	114°4	115°1	114°4	112°22
111°1	110°6	112°0	111°9	112°8	113°0	117°6	108°3	124°5	119°4	115°5	115°2	113°38
113°0	113°6	113°7	114°4	114°2	123°3	112°4	112°2	110°4	115°2	115°6	116°2	112°45
114°4	112°8	118°3	116°0	113°6	112°6	113°4	114°2	113°8	115°4	114°0	108°2	113°39
113°2	116°8	127°6	112°0	115°6	110°6	—	—	—	—	—	—	113°27
111°8	112°6	112°4	113°2	113°2	114°6	114°6	113°9 <sup>b</sup>	113°9	111°0	113°5	111°4	112°96
113°0	112°5	112°8	116°8	112°4	113°1	114°1	123°6	114°8	112°3	114°6	111°0	113°19
111°79	113°93	114°34	115°18	111°47	115°0	115°28	114°88	115°21	114°75	115°23	114°86	113°32
110°0	111°6	112°3	114°1	112°8	121°6	118°4	118°4	115°6	115°8	115°4	117°2	113°35
110°3	111°3	111°8	112°2	113°2	113°4	114°2	114°6	111°4	120°8	121°2	112°0	112°88
112°0	112°2	113°0	112°2	112°8	113°1	114°0	114°6	115°3	116°0	114°2	115°0	113°27
111°6	113°2	113°6	112°1	113°2	116°8	—	—	—	—	—	—	113°70
120°7	111°7	113°4	114°0	117°9	117°4	111°0	116°9	115°8	106°0	110°2	117°8	108°90
113°0	116°6	114°0	113°2	107°2	113°3	118°0	107°7	112°2	109°0	106°6	113°8	111°57
112°0	112°3	114°0	123°5	111°4	114°0	107°4	115°4	114°8	111°6	114°2	114°0	112°45
113°4	113°0	113°0	114°2	113°2	113°2	—	—	—	—	—	—	113°37
113°3	112°2	115°0	114°0	112°8	113°9	118°3	116°3	121°7	119°4	116°8	119°7	113°43
106°4	108°0	110°5	129°5	119°2	114°8	113°0	116°2	112°8	116°4	116°0	117°2	111°44
107°2	110°8	112°0	112°6	112°4	114°5	117°4	119°8	119°1	118°7	114°8	115°9	111°15
103°8	113°0	105°6	112°7	118°0	114°0	124°0	—	115°0	105°2	116°4	117°2	113°42
107°4	116°8	121°8	119°4	140°0	120°5	114°0	100°2	—	125°5	120°0	118°7	114°51
109°8	111°2	111°6	111°8	112°2	113°2	114°2	113°0	113°2	113°7	112°6	117°0	112°20
110°0	110°9	110°0	111°6	113°2	113°4	—	—	—	—	—	—	112°11
108°0	107°2	110°0	112°4	112°6	113°8	114°0	114°5	115°2	116°4	115°0	112°2	113°0
113°2	113°4	112°8	112°8	114°4	114°0	114°7	115°2	117°2	115°0	115°8	115°7	111°78
111°9	113°0	110°7	112°6	112°8	111°9	113°0	113°6	114°0	115°0	115°2	116°2	112°68
110°0	110°4	112°9	110°5	113°0	113°8	113°0	115°0	114°4	115°5	115°4	115°4	111°67
113°9	113°0	112°5	113°2	129°0	129°4	120°0	115°0	110°2	112°4	126°4	114°4	114°46
115°4	113°0	118°0	117°4	111°6	113°0	—	—	—	—	—	—	113°17
113°6	113°8	113°0	115°9	115°0	114°5	114°2	115°5	110°5	113°0	116°0	115°9	112°68
111°9	112°0	114°8	120°3	116°0	115°8	111°8	111°0	114°4	115°1	115°3	116°2	112°80
113°2	113°0	111°0	118°0	118°0	114°5	112°5	116°2	116°2	117°0	115°0	116°2	113°83
110°6	113°0	111°9	112°0	113°6	114°8	114°0	113°8	109°2	110°0	115°2	117°7	112°03
111°30	113°86	112°89	114°89	115°54	115°32	114°89	114°49	114°80	114°86	115°58	116°20	112°65

<sup>a</sup> Three minutes late.

<sup>b</sup> Seven minutes late.

DECLINATION.													12h.	
Angular Value of one Scale Division of the Declinometer = 0" 721. Increasing Numbers denote decreasing Westerly Declination.													Sc. Div.	
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
MAY.	1	118° 4	120° 7	118° 2	116° 4	110° 9	107° 8	103° 1	103° 0	105° 2	108° 3	111° 0	113° 0	113° 2
	2	117° 0	119° 4	118° 0	116° 0	112° 0	106° 2	102° 6	103° 0	103° 0	107° 2	109° 4	110° 0	110° 0
	3	—	—	—	—	—	—	—	—	—	—	—	—	—
	4	124° 0	126° 7	125° 1	123° 8	120° 0	98° 2	101° 2	102° 8	101° 2	102° 4	105° 7	101° 0	108° 2
	5	118° 6	119° 0	117° 0	113° 8	111° 0	106° 4	101° 5	101° 4	102° 0	103° 2	103° 4	103° 9	106° 0
	6	117° 4	122° 5	121° 2	118° 0	113° 9	108° 7	105° 4	104° 0	105° 0	110° 2	109° 7	111° 0	111° 2
	7	119° 8	119° 4	119° 5	117° 4	114° 1	109° 0	102° 0	100° 0	100° 5	102° 4	104° 0	106° 0	107° 2
	8	118° 0	120° 5	119° 0	116° 6	114° 1	110° 0	104° 0	102° 0	104° 2	102° 7	103° 2	107° 0	111° 2
	9	118° 0	121° 8	121° 3	117° 0	109° 0	104° 2	101° 8	105° 0	105° 0	104° 2	102° 3	107° 0	111° 0
	10	—	—	—	—	—	—	—	—	—	—	—	—	—
	11	116° 2	116° 0	116° 4	118° 5	114° 6	112° 2	108° 8	105° 0	104° 8	103° 6	103° 3	105° 8	113° 3
	12	118° 2	120° 2	126° 4	121° 0	107° 0	107° 2	106° 1	109° 2	111° 1	105° 0	113° 2	107° 7	105° 0
	13	114° 8	116° 4	116° 5	116° 2	118° 5	115° 5	111° 2	112° 0	109° 0	109° 0	108° 3	108° 0	117° 0
	14	117° 0	116° 2	116° 4	115° 6	109° 5	111° 3	108° 0	101° 0	103° 2	107° 0	107° 0	109° 2	110° 4
	15	119° 0	121° 0	118° 8	118° 2	118° 2	111° 2	107° 8	106° 8	105° 4	106° 4	108° 6	110° 2	111° 0
	16	118° 6	119° 8	121° 0	119° 2	115° 0	110° 8	109° 8	106° 4	104° 8	106° 0	107° 4	107° 7	109° 8
	17	—	—	—	—	—	—	—	—	—	—	—	—	—
	18	121° 4	120° 0	124° 2	120° 0	114° 3	107° 4	106° 0	99° 2	100° 0	101° 7	106° 1	108° 3	107° 3
	19	120° 4	122° 8	113° 4	117° 1	112° 1	106° 2	106° 5	103° 0	100° 0	104° 0	108° 4	109° 5	111° 5
	20	105° 0	121° 4	117° 8	107° 3	102° 2	98° 2	103° 2	104° 0	108° 8	107° 0	112° 8	116° 2	114° 8
	21	113° 2	121° 2	120° 7	112° 8	106° 2	102° 2	100° 0	100° 0	104° 6	106° 0	110° 3	113° 8	114° 3
	22	118° 0	117° 4	124° 0	116° 4	111° 5	108° 2	100° 0	98° 5	103° 0	107° 5	111° 6	113° 9	115° 4
	23	124° 6	127° 2	126° 8	115° 0	116° 2	103° 2	103° 2	101° 0	102° 0	104° 7	109° 2	112° 8	113° 8
	24	—	—	—	—	—	—	—	—	—	—	—	—	—
	25	108° 8	109° 6	113° 4	107° 0	109° 5	108° 0	105° 0	104° 2	103° 8	101° 8	106° 8	107° 2	114° 6
	26	115° 0	118° 8	120° 0	120° 0	114° 2	107° 8	101° 4	104° 4	104° 6	105° 0	109° 8	110° 4	112° 4
	27	115° 0	116° 0	117° 0	114° 2	111° 2	104° 8	102° 0	100° 0	101° 8	104° 8	106° 5	111° 0	113° 2
	28	120° 0	120° 0	122° 2	121° 2	115° 0	109° 6	101° 2	102° 6	103° 0	105° 2	109° 0	112° 0	113° 8
	29	119° 2	121° 8	121° 4	121° 0	115° 3	109° 0	102° 0	100° 3	104° 0	104° 8	106° 8	109° 2	108° 2
	30	125° 0	130° 0	126° 0	120° 2	117° 0	109° 2	106° 2	97° 6	100° 6	104° 2	105° 8	115° 4	108° 0
	31	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	117° 72	120° 22	120° 07	116° 92	112° 79	107° 40	104° 46	103° 05	103° 76	105° 28	107° 68	109° 51	111° 22	
JUNE.	1	120° 0	115° 5	113° 9	115° 8	112° 3	114° 0	106° 2	107° 4	108° 0	106° 2	107° 8	109° 2	110° 4
	2	125° 8	127° 7	126° 2	118° 4	114° 2	112° 0	109° 6	100° 0	103° 8	105° 0	105° 9	108° 0	126° 0
	3	120° 1	122° 2	121° 0	120° 2	119° 3	112° 8	113° 8	110° 0	111° 4	108° 7	108° 1	115° 1	113° 2
	4	118° 2	120° 4	117° 8	115° 8	111° 2	106° 6	101° 0	100° 0	105° 0	108° 0	108° 8	111° 0	112° 0
	5	117° 0	118° 4	121° 5	121° 2	119° 9	114° 3	111° 0	105° 3	105° 0	101° 0	107° 0	113° 2	113° 0
	6	119° 0	120° 0	119° 2	115° 0	113° 2	109° 7	106° 7	103° 0	102° 2	100° 0	106° 2	108° 4	107° 6
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	120° 0	121° 4	121° 0	120° 2	115° 0	112° 0	110° 2	105° 6	103° 0	102° 8	103° 2	106° 8	111° 0
	9	124° 6	125° 0	126° 0	118° 2	115° 0	109° 2	107° 0	102° 3	102° 5	101° 8	105° 6	107° 0	110° 4
	10	120° 0	122° 6	123° 0	125° 4	124° 6	116° 2	111° 8	110° 0	106° 6	105° 0	105° 0	109° 0	112° 8
	11	120° 2	122° 4	123° 0	121° 8	117° 3	112° 3	108° 8	105° 0	101° 8	100° 9	101° 7	105° 6	109° 8
	12	117° 8	118° 2	118° 0	120° 0	117° 8	111° 5	113° 0	107° 8	106° 0	105° 8	106° 4	108° 8	109° 8
	13	131° 6	131° 8	118° 0	119° 0	116° 2	109° 6	105° 0	105° 6	103° 2	104° 6	105° 7	110° 1	111° 8
	14	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	118° 0	113° 7	117° 2	118° 6	117° 0	114° 8	115° 6	101° 3	100° 0	106° 0	103° 5	109° 7	108° 8
	16	115° 2	109° 4	122° 6	118° 2	121° 0	109° 2	107° 0	109° 2	105° 0	110° 0	110° 9	111° 0	123° 0
	17	119° 8	124° 2	123° 7	123° 0	116° 8	111° 3	106° 3	104° 8	107° 8	108° 0	112° 0	113° 7	112° 6
	18	115° 8	120° 0	121° 3	116° 8	111° 8	111° 0	106° 6	105° 0	104° 2	110° 8	110° 4	112° 0	115° 4
	19	117° 8	118° 2	120° 6	114° 0	109° 6	107° 3	107° 7	103° 8	103° 8	106° 2	108° 5	110° 2	111° 2
	20	119° 0	120° 2	119° 2	119° 8	113° 8	109° 8	107° 0	107° 0	105° 6	107° 0	108° 4	111° 0	113° 0
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	129° 6	128° 4	126° 2	121° 8	114° 3	108° 8	105° 6	105° 1	102° 3	105° 1	107° 2	110° 0	117° 3
	23	119° 2	120° 4	119° 2	117° 0	115° 2	108° 8	108° 0	102° 8	105° 2	109° 2	106° 3	111° 0	113° 2
	24	117° 0	122° 3	114° 8	113° 0	111° 3	109° 3	103° 8	105° 0	106° 3	109° 2	110° 2	113° 2	114° 4
	25	121° 0	121° 3	120° 0	118° 4	116° 0	114° 2	107° 4	105° 0	102° 2	103° 0	105° 3	109° 4	111° 8
	26	118° 0	119° 2	119° 8	120° 4	119° 2	113° 8	108° 0	105° 8	105° 0	105° 2	105° 2	106° 9	107° 0
	27	120° 6	121° 0	119° 4	117° 7	115° 2	112° 8	106° 8	100° 0	100° 0	99° 0	99° 8	103° 1	107° 2
	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	119° 8	121° 9	123° 0	119° 6	117° 9	110° 9	108° 4	102° 8	100° 3	100° 0	100° 0	104° 8	108° 0
	30	123° 6	124° 2	123° 1	125° 2	121° 3	114° 2	108° 4	106° 4	105° 3	104° 8	105° 2	107° 9	108° 8
	Hourly Means	120° 33	121° 15	120° 70	119° 02	116° 09	111° 40	108° 14	104° 85	104° 37	105° 24	106° 32	109° 47	112° 29



DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JULY.	1	119°0	121°0	121°1	123°0	120°0	111°6	111°2	108°2	105°8	103°8	104°4	108°7
	2	112°0	128°2	123°0	123°8	118°0	114°8	114°6	109°2	106°7	104°5	104°8	105°9
	3	118°2	117°4	119°4	116°4	113°8	115°7	114°5	111°4	109°9	107°1	107°7	109°7
	4	130°4	115°2	115°0	117°4	115°5	112°8	108°8	108°5	106°2	105°0	107°0	110°0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	114°0	123°0	123°5	125°0	116°0	109°9	99°2	104°0	103°2	104°0	107°0	116°4
	7	121°0	126°0	130°0	119°8	120°0	115°0	107°2	106°8	113°2	106°8	105°0	108°4
	8	117°0	118°4	122°4	118°0	118°0	114°2	108°0	106°2	104°2	104°6	105°5	110°8
	9	116°0	121°8	125°0	124°2	121°2	112°2	111°3	108°3	110°0	102°2	104°4	107°0
	10	122°0	123°1	123°0	119°8	119°8	114°2	111°4	104°8	102°0	106°2	106°0	107°0
	11	132°8	123°6	117°0	108°0	110°6	117°0	114°2	108°6	98°0	103°8	108°8	112°2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	114°0	120°0	124°4	122°2	119°0	110°8	106°8	104°0	109°2	109°8	108°0	113°8
	14	117°4	119°0	118°2	118°4	116°0	110°8	107°0	104°8	107°4	106°9	105°8	105°0
	15	115°0	124°2	124°4	124°8	118°6	118°2	109°2	109°4	106°9	109°6	108°8	109°0
	16	115°5	112°5	120°0	117°4	116°5	108°0 <sup>a</sup>	105°0	106°7	109°0	107°0	110°0	111°0
	17	121°0	124°0	123°4	120°4	115°0	110°0	109°0	105°4	107°0	107°8	108°0	112°2
	18	115°7	123°0	117°3	116°4	114°0	106°6	103°8	101°2	104°6	108°0	114°9	115°0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	117°0	121°0	120°2	118°6	114°9	110°5	109°2	109°4	108°8	107°0	108°0	110°4
	21	119°2	121°0	122°8	123°8	118°5	117°0	114°0	109°0	107°0	107°5	107°1	109°8
	22	120°8	120°0	119°0	118°8	114°8	109°5	106°2	100°9	105°3	107°5	108°2	109°2
	23	120°2	124°4	123°5	116°4	114°1	106°9	107°0	105°2	104°0	105°5	109°0	111°0
	24	121°0	121°2	124°8	121°8	120°5	109°8	110°9	106°2	95°4	97°0	99°4	101°0
	25	119°2	124°4	122°2	118°8	122°5	117°8	111°8	111°8	105°3	105°5	112°0	108°0
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	123°3	124°4	125°6	121°3	118°5	111°4	107°2	102°0	103°0	100°0	103°0	109°0
	28	119°8	123°2	124°1	120°7	113°1	106°4	103°7	102°0	103°9	104°5	105°0	110°0
	29	127°0	128°0	119°2	118°0	108°8	103°6	95°2	105°0	102°2	108°6	106°6	110°4
	30	111°2	111°0	119°8	120°4	117°0	108°2	107°4	110°0	103°8	99°6	97°8	97°2
	31	119°8	122°4	117°8	113°0	114°5	107°8	105°2	101°8	105°4	106°0	105°0	107°8
Hourly Means	119°24	121°64	121°70	119°50	116°64	111°51	108°11	106°34	105°46	105°40	106°56	109°10	
AUGUST.	1	119°2	124°0	115°8	111°0	111°0	109°2	107°4	103°0	102°2	105°9	104°1	107°2
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	120°8	122°8	119°2	119°9	117°2	109°2	110°2	105°0	106°2	107°0	110°2	114°4
	4	121°3	125°5	122°7	121°3	116°0	111°0	105°7	105°0	104°2	104°8	107°0	109°8
	5	119°0	122°0	121°8	117°0	108°8	111°0	103°0	100°0	103°0	106°2	108°8	110°8
	6	121°	125°0	124°8	118°0	110°2	111°0	106°8	102°6	102°8	104°2	104°8	109°8
	7	110°8	120°2	123°2	123°7	117°2	114°2	115°5	109°4	105°2	115°8	112°0	108°8
	8	110°8	111°5	122°2	120°9	122°5	118°0	112°8	109°0	110°8	113°8	108°8	108°2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	109°6	112°0	120°4	122°7	118°3	114°8 <sup>b</sup>	106°0	103°8	102°2	103°0	106°0	109°2
	11	118°0	121°9	123°0	126°0	120°8	116°6	111°0	104°2	104°8	106°0	101°2	109°5
	12	118°0	119°2	119°0	112°2	107°0	101°4	102°4	107°0	108°2	112°0	107°6	114°8
	13	114°2	100°2	103°8	106°0	107°6	105°5	107°2	104°8	105°4	109°8	110°0	112°0
	14	118°2	129°0	119°0	106°7	100°6	98°2	106°0	105°5	102°0	102°0	102°9	108°3
	15	101°8	115°8	116°9	113°0	113°0	109°8	105°3	104°8	104°0	108°0	110°0	109°0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	122°8	125°3	121°8	122°0	116°0	114°0	106°0	102°5	104°2	104°2	106°0	109°5
	18	117°0	122°4	121°8	122°0	116°0	113°4	103°0	102°0	103°5	104°6	110°2	112°8
	19	111°4	121°8	121°2	120°4	111°0	106°0	100°4	101°2	100°0	104°8	107°3	110°2
	20	118°6	118°2	118°8	114°0	108°2	106°2	101°8	99°0	100°9	106°0	108°0	112°8
	21	121°0	120°6	120°0 <sup>d</sup>	120°6	110°3	106°8	104°3	107°0	103°8	102°0	105°0	109°2
	22	125°5	126°0	127°2	122°4	114°2	103°0	103°0	98°8	98°6	101°4	101°8	110°8
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	120°2	125°0	128°0	130°2	118°1	119°2	108°8	105°2	100°0	99°3	104°0	101°0
	25	119°2	116°5	119°8	123°3	113°6	107°8	104°6	101°8	105°4	105°0	106°2	108°0
	26	119°5	123°0	127°2	124°8	115°8	109°4	104°0	103°0	102°2	101°3	107°2	112°2
	27	113°0	119°4	122°0	118°2	112°8	103°8	103°0	104°0	100°4	100°0	109°6	109°0
	28	121°8	121°5	125°5	123°4	117°0	103°0	100°0	98°8	99°2	102°2	113°0	118°3
	29	117°2	121°2	121°4	116°0	116°0	113°5	113°3	107°0	102°8	104°0	107°4	106°9
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	118°4	120°0	118°4	116°5	115°6	109°7	104°5	102°8	104°2	106°0	110°0	109°2
Hourly Means	117°36	120°62	121°07	118°93	113°65	109°57	106°00	103°74	103°32	105°47	107°62	110°07	

<sup>a</sup> Four minutes late.<sup>b</sup> Fourteen minutes late.<sup>c</sup> Ten minutes late.<sup>d</sup> Five minutes late.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.	
111° 8	109° 4	121° 7	114° 0	111° 2	111° 9	109° 5	118° 2	119° 0	113° 2	125° 3	118° 6	114° 23	114° 36
114° 8	112° 0	111° 2	118° 8	121° 9	122° 0	120° 2	123° 3	123° 0	124° 4	131° 2	119° 2	116° 98	
110° 9	113° 0	114° 9	126° 0	128° 6	132° 6	117° 0	115° 8	117° 0	121° 8	123° 0	123° 8	116° 90	
109° 0	111° 2	107° 8	107° 2	117° 4	117° 6	—	—	—	—	—	—	—	
112° 2	112° 6	123° 8	105° 7	113° 9	122° 0	121° 9	117° 0	116° 8	115° 4	113° 1	119° 0	114° 11	
111° 0	119° 8	115° 0	111° 2	112° 0	107° 0	121° 8	114° 0	113° 7	113° 9	113° 2	110° 4	114° 26	
112° 0	111° 0	110° 7	117° 0	116° 8	115° 2	116° 2	116° 6	112° 2	110° 0	114° 6	117° 0	113° 19	
111° 0	112° 2	110° 4	112° 2	111° 6	112° 2	115° 0	117° 4	115° 3	116° 2	110° 5	120° 8	113° 70	
108° 4	109° 8	118° 8	114° 0	112° 2	1° 5	112° 0	110° 6	114° 4	120° 2	131° 0	141° 8	115° 17	
114° 8	109° 8	114° 2	126° 6	126° 5	121° 0	—	—	—	—	—	—	—	
114° 2	119° 1	119° 0	112° 5	114° 1	113° 0	116° 0	115° 8	113° 0	105° 0	92° 3	100° 0	112° 33	
112° 8	107° 4	115° 8	118° 2	115° 2	118° 7	138° 0	137° 0	120° 2	114° 0	111° 4	107° 4	114° 70	
112° 4	112° 5	113° 4	112° 4	119° 0	117° 2	115° 2	112° 0	114° 4	114° 0	114° 0	116° 0	114° 61	
113° 7	116° 0	114° 8	116° 4	112° 0	112° 8	112° 0	114° 8	116° 8	106° 0	104° 0	119° 8	112° 40	
113° 0	113° 0	111° 6	111° 7	112° 1	119° 2	113° 0	112° 0	110° 8	110° 0	110° 0	115° 0	113° 11	
112° 6	116° 8	123° 6	119° 0	114° 8	111° 2	—	—	—	—	—	—	—	
111° 0	112° 0	123° 0	117° 0	115° 0	112° 0	121° 6	107° 0	107° 4	108° 2	109° 0	108° 4	112° 77	
111° 0	111° 0	111° 8	112° 0	114° 0	121° 0	130° 2	125° 4	114° 4	113° 2	111° 4	114° 0	115° 25	
110° 2	110° 4	111° 4	111° 7	112° 4	112° 0	113° 2	116° 0	118° 0	115° 0	107° 6	115° 4	112° 23	
113° 8	114° 2	113° 0	112° 8	115° 2 <sup>a</sup>	112° 7	112° 0	112° 0	113° 0	113° 6	115° 0	118° 0	113° 02	
104° 8	104° 0	111° 2	108° 2	111° 5	118° 0	117° 2	111° 4	111° 0	109° 8	105° 0	116° 4	110° 85	
105° 0	118° 5	112° 0	116° 2	114° 2	114° 0	—	—	—	—	—	—	—	
110° 0	112° 2	119° 0	114° 7	117° 4	110° 0	113° 2	115° 4	116° 0	112° 7	112° 0	119° 2	114° 49	
107° 2	109° 2	111° 2	112° 0	113° 2	114° 0	111° 2	112° 5	115° 0	116° 6	118° 8	118° 0	113° 38	
110° 2	122° 2	109° 4	110° 5	112° 2	111° 6	114° 8	117° 0	112° 5	108° 8	112° 0	115° 0	112° 03	
103° 0	110° 6	108° 0	132° 7	117° 3	121° 6	110° 2	107° 0	114° 3	115° 5	113° 5	116° 2	111° 39	
110° 0	112° 8	109° 8	104° 2	115° 2	118° 0	104° 6	113° 0	105° 8	100° 0	109° 8	118° 0	110° 32	
110° 77	112° 69	114° 31	114° 62	115° 44	116° 15	115° 99	115° 43	113° 52	112° 47	113° 49	117° 11	113° 47	
114° 8	122° 2	115° 5	109° 2	111° 0	107° 2	—	—	—	—	—	—	—	
112° 2	112° 2	129° 0	116° 2	112° 4	110° 8	105° 2	112° 0	110° 4	112° 8	113° 4	115° 0	111° 20	
112° 8	112° 4	110° 8	112° 0	113° 8	111° 8	111° 0	111° 0	112° 2	113° 2	114° 5	113° 0	113° 74	
111° 2	120° 4	112° 3	110° 8	108° 2	111° 1	109° 2	112° 3	117° 2	122° 8	122° 0	122° 4	112° 97	
110° 0	118° 0	132° 0	170° 0	140° 0	131° 4	122° 2	110° 2	104° 2	91° 3	106° 7	108° 2	116° 17	
111° 0	116° 2	110° 6	113° 0	130° 0	114° 2	122° 0	79° 4	121° 8	117° 8	113° 0	99° 5	113° 52	
112° 0	130° 0	120° 0	114° 8	117° 6	124° 2	—	—	—	—	—	—	—	
109° 2	110° 0	114° 6 <sup>b</sup>	119° 2	117° 2	111° 2	115° 8	125° 5	122° 5	100° 6	112° 0	109° 8	115° 59	
117° 2	116° 4	118° 2	123° 6	121° 2	110° 0	116° 2	113° 8	120° 4	114° 0	112° 0	115° 7	112° 56	
112° 0	108° 0	109° 7	124° 1	115° 7	121° 9	113° 7	109° 8	111° 4	111° 9	112° 8	112° 0	114° 34	
113° 6	111° 8	113° 2	118° 0	114° 2	130° 4	129° 0	123° 0	127° 2	118° 8	107° 0	111° 2	112° 66	
109° 8	109° 2	113° 6	150° 4	124° 5	128° 4	88° 6	105° 5	92° 0	119° 3	109° 6	100° 8	110° 42	
142° 8	122° 8	117° 0	117° 6	119° 4	110° 5	—	—	—	—	—	—	—	
111° 2	113° 2	122° 2	128° 0	117° 9	111° 0	125° 0	122° 0	116° 5	110° 2	110° 0	113° 8	114° 25	
113° 8	115° 9	126° 9	120° 8	116° 0	119° 0	112° 3	112° 0	112° 2	111° 0	109° 0	111° 2	113° 69	
111° 8	110° 0	112° 8	120° 2	112° 6	111° 3	111° 0	101° 2	113° 8	113° 4	115° 0	110° 0	113° 83	
113° 2	111° 2	111° 0	110° 0	111° 2	109° 8	110° 6	111° 2	110° 2	114° 0	109° 8	118° 0	110° 53	
111° 8	110° 0	108° 8	109° 0	117° 0	113° 3	112° 6	115° 2	112° 8	114° 8	116° 8	120° 3	112° 21	
108° 2	110° 9	112° 2	108° 2	110° 0	115° 8	—	—	—	—	—	—	—	
120° 0	107° 0	114° 1	130° 0	123° 3	118° 0	111° 2	114° 0	112° 0	114° 0	116° 0	118° 2	111° 81	
122° 8	111° 3	116° 0	115° 2	113° 2	114° 6	116° 0	111° 2	111° 0	108° 0	103° 2	115° 0	115° 41	
113° 0	111° 2	111° 2	112° 0	113° 5	127° 3	121° 8	116° 8	112° 1	113° 1	114° 3	114° 0	113° 87	
116° 0	108° 1	109° 2	112° 0	111° 0	118° 5	108° 8	102° 0	112° 0	120° 0	109° 0	119° 0	110° 99	
105° 2	107° 0	109° 9	120° 0	135° 4	112° 2	111° 0	108° 9	106° 6	110° 2	101° 2	110° 0	112° 22	
109° 1	107° 5	106° 4	109° 7	109° 8	113° 0	—	—	—	—	—	—	—	
109° 0	111° 3	123° 4	120° 2	114° 8	111° 0	110° 0	111° 2	111° 5	110° 0	113° 0	113° 8	112° 27	
112° 44	113° 21	115° 45	119° 78	117° 34	116° 07	115° 91	113° 09	113° 22	112° 91	111° 83	113° 14	112° 94	

late.

<sup>a</sup> Sixteen minutes late.

<sup>b</sup> Five minutes late.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
SEPTEMBER.	1	116° 9	121° 2	120° 3	114° 8	111° 6	105° 0	101° 9	101° 0	103° 8	104° 8	108° 5	110° 4
	2	119° 0	120° 5	120° 3	116° 2	109° 8	105° 0	102° 2	102° 2	103° 8	107° 2	109° 2	111° 4
	3	120° 0	124° 0	122° 7	118° 0	111° 0	104° 0	100° 2	100° 2	102° 6	106° 4	110° 0	111° 1
	4	98° 0	117° 0	111° 0	121° 2	108° 9	101° 4	99° 0	99° 8	102° 0	104° 8	108° 1	120° 6
	5	129° 0	111° 4	116° 0	113° 1	105° 8	99° 1	104° 6	102° 0	101° 0	110° 7	114° 9	105° 0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	116° 6	121° 0	118° 4	116° 8	113° 2	108° 1	104° 1	109° 2	107° 2	111° 1	114° 1	115° 1
	8	116° 8	115° 0	110° 8	111° 3	113° 0	109° 0	105° 3	105° 0	111° 0	114° 8	111° 8	111° 0
	9	119° 0	124° 0	120° 3	114° 7	110° 2	107° 0	102° 8	102° 0	104° 0	109° 6	113° 5	116° 2
	10	116° 0	118° 6	120° 0	118° 2	110° 2	100° 8	98° 6	103° 4	98° 8	98° 8	101° 8	108° 0
	11	83° 4	111° 5	111° 6	108° 8	101° 0	104° 3	100° 0	100° 7	103° 4	108° 9	117° 5	121° 0
	12	112° 7	115° 4	115° 1	111° 9	104° 0	100° 0	102° 8	105° 0	112° 8	110° 0	117° 0	118° 0
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	122° 8	119° 9	112° 2	113° 0	106° 0	101° 2 <sup>b</sup>	101° 0	100° 0	101° 8	109° 0	114° 0	111° 8
	15	112° 0	109° 6	119° 0	115° 4	106° 9	103° 2	102° 8	103° 0	107° 2	113° 0	115° 2	119° 1
	16	118° 2	120° 2	115° 5	113° 8	112° 0	108° 7	107° 8	107° 6	109° 2	111° 2	112° 4	112° 1
	17	125° 2	124° 8	122° 0	116° 5	111° 5	108° 3	101° 2	102° 3	101° 8	108° 8	114° 8	112° 8
	18	116° 4	119° 6	119° 1	118° 0	113° 1	108° 0	103° 2	102° 8	104° 1	107° 8	111° 3	113° 0
	19	118° 0	116° 0	118° 8	116° 0	115° 0	108° 9	104° 0	102° 2	101° 0	100° 2	102° 0	103° 2
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	123° 0	126° 0	123° 0	121° 4	117° 0	112° 2	107° 4	103° 0	101° 2	99° 6	95° 5	105° 8
	22	87° 2	90° 2	73° 0	82° 4	99° 2	96° 7	109° 5	117° 1	106° 6	110° 8	99° 3	116° 0
	23	11° 4	113° 5	119° 0	116° 7	112° 2	109° 9	101° 0	103° 0	102° 9	103° 5	103° 5	104° 6
	24	116° 8	121° 0	119° 0	116° 3	111° 0	106° 2	103° 8	101° 5	101° 2	106° 5	104° 6	106° 0
	25	117° 0	120° 5	118° 9	123° 0	111° 8	109° 0	106° 0	102° 2	102° 0	105° 0	107° 2	110° 0
	26	118° 2	121° 0	119° 6	118° 0	115° 2	111° 0	107° 0	105° 0	101° 4	106° 4	109° 2	110° 5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	118° 5	117° 8	116° 6	117° 6	113° 0	108° 4	101° 0	109° 8	107° 2	107° 2	109° 1	110° 0
	29	115° 4	117° 2	116° 8	114° 1	111° 8	110° 1	106° 8	106° 7	106° 0	105° 8	107° 8	108° 5
	30	114° 6	115° 0	116° 2	119° 0	113° 4	111° 2	101° 5	105° 0	106° 0	105° 4	103° 0	106° 4
Hourly Means	114° 85	117° 31	115° 97	114° 85	110° 30	106° 03	103° 75	103° 91	101° 69	107° 20	109° 05	111° 64	
OCTOBER.	1	116° 2	120° 0	117° 8	110° 8	109° 7	104° 3	107° 2	107° 0	106° 3	110° 4	111° 8	113° 0
	2	104° 8	113° 1	110° 3	105° 4	109° 2	108° 0	105° 2	106° 4	101° 6	101° 7	107° 1	102° 7
	3	121° 0	120° 0	120° 2	118° 6	118° 0	113° 8	109° 2	101° 9	105° 8	108° 6	109° 8	110° 8
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	116° 2	117° 2	118° 4	111° 0	107° 2	106° 1	104° 0	103° 5	105° 5	109° 2	111° 8	112° 2
	6	114° 4	113° 3	116° 0	114° 2	110° 3	105° 0	101° 2	102° 0	103° 8	108° 0	110° 0	110° 8
	7	116° 0	121° 8	122° 2	120° 0	108° 3	106° 2	100° 7	99° 3	101° 2	107° 2	101° 2	99° 2
	8	116° 3	73° 5	95° 5	111° 0	101° 0	102° 0	102° 8	100° 8	102° 4	109° 2	111° 2	114° 2
	9	113° 4	114° 2	117° 0	117° 4	114° 2	110° 1	106° 4	101° 0	100° 8	101° 2	108° 8	108° 9
	10	101° 3	98° 8	100° 4	103° 3	105° 6	108° 0	105° 0	103° 8	101° 7	105° 7	111° 0	111° 8
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	119° 0	113° 1	102° 2	106° 4	109° 6	111° 0 <sup>d</sup>	109° 5	111° 0	108° 0	109° 7	111° 8	113° 0
	13	113° 0	115° 5	116° 2	116° 5	111° 0	108° 8	106° 9	108° 0	108° 0	109° 6	116° 6	111° 0
	14	115° 6	116° 0	117° 1	117° 4	113° 0	107° 8	107° 0	107° 5	110° 0	111° 8	112° 9	112° 2
	15	115° 0	115° 6	118° 0	117° 2	115° 3	111° 0	106° 8	107° 0	108° 8	111° 1	111° 6	112° 5
	16	118° 8	117° 0	116° 6	117° 0	111° 5	108° 3	107° 8	109° 4	110° 8	111° 8	111° 7	111° 0
	17	117° 9	117° 9	117° 0	117° 0	113° 0	109° 2	105° 8	106° 0	105° 0	109° 0	111° 1	111° 0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	115° 7	115° 5	117° 8	120° 0	119° 0 <sup>e</sup>	114° 0	105° 8	103° 0	105° 4	106° 0	106° 0	105° 2
	20	118° 2	121° 2	123° 0	121° 2	119° 8	109° 4	107° 6	106° 0	106° 8	107° 8	109° 2	110° 1
	21	114° 0	114° 8	120° 0	119° 8	119° 1	112° 5	109° 8	107° 4	108° 0	110° 5	108° 9	114° 0
	22	116° 3	119° 1	114° 0	108° 7	111° 0	110° 2	108° 8	103° 0	103° 5	107° 6	112° 5	110° 3
	23	118° 8	118° 1	117° 2	119° 7	118° 5	111° 0	109° 9	107° 2	107° 0	109° 0	110° 0	112° 0
	24	115° 2	116° 9	119° 0	120° 0	117° 8	112° 5	110° 0	110° 7	106° 4	107° 2	108° 2	110° 4
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	110° 2	115° 0	119° 0	119° 2	119° 8	115° 0	109° 4	107° 0	105° 2	107° 4	108° 9	110° 9
	27	115° 0	117° 2	118° 7	121° 8	118° 2	116° 0	111° 0	109° 0	105° 1	108° 1	108° 6	108° 2
	28	115° 4	115° 6	116° 6	118° 8	116° 8	115° 6	110° 8	108° 7	107° 8	108° 3	111° 2	111° 0
	29	114° 2	113° 5	117° 5	117° 1	118° 6	114° 8	112° 0	108° 6	106° 4	108° 0	108° 7	110° 6
	30	108° 2	111° 0	100° 0	111° 0	115° 0	114° 0	113° 0	111° 4	110° 4	112° 0	112° 0	112° 8
	31	109° 7	112° 0	116° 2	114° 4	112° 0	112° 0	110° 2	109° 0	111° 2	111° 7	111° 8	112° 2
November 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	114° 37	114° 00	114° 96	115° 37	113° 76	110° 37	107° 55	106° 37	106° 44	108° 55	110° 27	111° 41	

<sup>a</sup> Forty minute's late.

<sup>b</sup> Eighteen minute's late.

<sup>c</sup> Four minute's late.

DECLINATION.  
Angular Value of one Scale Division of the Declinometer = 0°.721. Increasing Numbers denote decreasing Westerly Declination.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
113°2	111°2	110°7	110°5	116°0	111°4	118°2	114°7	114°2	112°8	112°0	116°5	111°73
111°0	109°8	110°4	109°5	111°1	111°1	113°1	117°2	115°0	110°8	115°8	118°0	112°03
110°2	108°0	106°5	108°7	108°2	108°8	120°2	112°7	125°0	109°0	121°0	114°2	111°86
110°8	111°8	125°9	110°0	118°0	109°8	113°3	112°8	110°0	104°0	100°0	110°0	109°51
153°2	120°0	133°8	125°0	115°4	117°2	—	—	—	—	—	—	—
—	—	—	—	—	—	109°8	103°0	112°2	111°0	107°8	113°4	113°93
115°3	112°5	111°2	112°0	110°0	110°5	112°2	115°0	112°7	111°3	120°0	115°0	113°02
113°4	111°8	112°5	111°0	110°6	108°1	110°4	113°3	112°2	112°5	115°9	111°54	—
115°8	113°0	112°2	110°9	108°9	107°0	107°8	108°9	112°3	115°7	117°7	116°0	112°06
115°8	112°0	110°8	—	113°9	112°4	109°0	121°2	123°2	123°0	128°4	123°8	112°47
112°2	152°2	118°7	116°2	118°8	120°8	102°0	108°8	108°6	102°2	113°4	119°3	111°05
114°0	110°2	122°0	112°4	112°0	110°4	—	—	—	—	—	—	—
—	—	—	—	—	—	110°2	112°4	111°8	126°8	121°3	120°0	112°84
115°0	121°8	111°4	113°3	123°5	121°2	109°4	120°8	118°0	121°2	111°0	120°2	113°44
113°8	113°0	112°3	111°0	111°3	112°2	113°0	114°0	114°0	115°7	115°5	115°0	111°97
112°4	112°8	125°0	115°2	113°3	112°0	114°0	115°0	117°0	113°6	108°8	122°7	113°72
112°9	116°3	115°0	112°2	112°0	112°4	115°0	113°2	115°0	104°4	117°0	121°8	113°47
111°2	113°0	112°8	112°4	118°2	115°0	113°2	113°2	114°3	113°1	115°0	118°0	112°74
111°4	113°0	112°8	113°8	113°0	114°5	—	—	—	—	—	—	—
—	—	—	—	—	—	112°1	101°4	120°7	116°8	121°0	125°2	112°04
108°2	120°1	107°4	101°1	116°6	121°4	117°7	136°2	131°6	137°0	155°2	101°2	116°32
113	116°0	114°0	121°5	122°9	121°0	126°0	114°0	110°0	112°6	113°4	114°8	108°39
99°3	107°0	108°5	107°8	118°8	112°7	109°0	112°0	117°1	117°8	116°8	117°7	110°53
108°4	109°2	110°2	111°0	112°0	112°4	113°0	112°8	114°2	114°4	116°5	116°3	111°01
113°2	111°2	112°2	125°0	117°8	113°2	105°0	109°7	118°0	109°0	119°0	116°4	112°60
115°4	111°8	111°1	111°5	113°0	115°0	—	—	—	—	—	—	—
—	—	—	—	—	—	112°0	110°0	118°3	118°0	113°9	114°8	112°93
123°0	113°3	109°3	112°0	112°8	113°0	113°2	113°6	113°0	113°0	111°0	114°8	112°67
109°0	113°1	114°0	110°3	111°5	112°6	112°0	113°5	112°8	115°0	115°0	113°1	111°62
109°0	105°8	106°0	106°0	108°8	112°2	115°0	123°5	122°0	117°2	107°2	116°1	111°19
114°34	111°12	113°72	112°41	114°17	113°51	112°52	113°83	115°91	114°87	116°74	116°54	112°19
124°6	122°2	111°0	113°3	112°2	111°5	111°2	112°0	105°0	110°9	115°1	107°5	112°12
100°2	112°1	128°2	139°7	123°0	123°2	112°0	119°4	123°6	122°4	126°5	126°0	113°91
110°0	111°2	112°0	112°1	112°0	111°9	—	—	—	—	—	—	—
—	—	—	—	—	—	112°2	113°2	113°7	114°8	115°2	115°0	113°21
113°0	113°5	113°1	112°2	112°3	111°8	113°0	113°0	114°2	113°3	116°5	115°4	111°82
120°8	113°8	115°0	116°8	115°1	119°2	120°0	119°2	117°0	110°0	114°0	113°1	112°55
111°2	111°8	115°0	152°0	126°6	118°2	138°8	112°0	110°0	119°0	122°0	117°0	115°12
119°0	121°6	111°1	115°0	113°1	120°0	116°2	118°0	105°2	113°2	115°3	115°0	109°52
108°9	123°8	119°0	122°8	121°1	123°0	134°4	128°6	111°8	117°0	108°4	128°8	118°6
111°2	112°0	112°0	110°4	110°8	111°0	—	—	—	—	—	—	—
—	—	—	—	—	—	111°0	113°5	118°8	108°8	111°0	117°8	108°78
113°0	113°0	113°2	112°2	108°8	111°8	112°8	113°9	112°6	113°1	115°0	113°0	111°94
112°1	117°5	113°0	111°7	112°0	113°0	113°3	113°3	113°2	114°0	113°8	114°0	112°88
112°1	112°0	112°7	110°0	130°0	125°6	115°3	122°0	115°2	110°0	103°4	120°4	114°11
110°3	110°7	118°2	111°2	112°0	112°4	112°0	111°2	111°0	117°5	116°5	117°8	113°27
111°8	111°2	113°2	117°0	114°0	114°0	—	—	—	—	—	—	—
—	—	—	—	—	—	113°1	111°0	111°2	114°4	114°8	113°2	112°82
109°2	105°8	122°1	115°0	114°0	121°2	113°8	110°0	112°8	112°8	111°7	117°0	113°88
113°2	113°3	111°7	113°2	113°2	113°0	112°2	111°0	111°0	113°4	114°2	114°4	113°31
113°9	112°0	113°9	113°3	133°6	121°2	111°0	111°2	113°2	115°2	106°2	110°2	111°03
126°8	110°2	111°5	115°8	111°0	112°2	116°2	111°4	108°2	105°4	111°2	112°0	111°79
112°4	113°0	113°8	112°2	113°8	122°8	116°6	113°2	111°0	113°3	114°7	115°0	113°88
108°2	113°4	117°0	126°6	115°2	116°2	—	—	—	—	—	—	—
—	—	—	—	—	—	113°8	111°1	112°2	113°0	113°8	109°2	113°50
112°0	112°6	113°2	113°7	111°9	116°3	112°8	113°8	111°1	112°0	112°3	112°0	112°78
111°2	112°0	113°0	114°2	116°0	115°2	112°2	111°2	112°6	113°2	113°7	115°2	113°23
111°8	112°0	119°0	113°0	115°0	115°4	117°2	112°0	113°2	117°8	115°0	118°1	114°00
112°2	113°4	113°0	118°6	111°2	115°8	115°6	117°6	113°0	115°5	115°2	116°4	113°77
113°8	111°8	116°4	119°4	120°6	118°9	115°6	107°8	115°5	115°0	111°1	115°0	112°99
112°2	112°4	113°0	113°7	113°2	113°3	—	—	—	—	—	—	—
—	—	—	—	—	—	120°0	115°0	114°8	114°2	114°0	114°2	113°02
113°67	113°63	115°06	117°55	117°21	116°84	115°66	114°95	113°59	113°58	114°80	115°06	114°09

\* Twenty-five minutes late.

Three minutes late.

C 2



DECLINATION.													12 <sup>h</sup> .
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
NOVEMBER.													
2	111°0	112°8	109°0	109°0	111°4	104°2	103°2	107°7	106°2	106°2	112°2	107°1	112°0
3	114°2	113°4	105°8	110°6	114°4	113°1	110°6	110°2	110°2	111°0	110°9	109°9	112°1
4	111°0	114°2	115°1	115°2	113°8	110°8	108°8	107°8	109°0	111°0	111°6	111°2	110°2
5	114°3	116°0	117°0	118°0	116°8	111°0	106°8	104°2	106°7	109°0	111°0	111°5	112°5
6	116°0	114°8	118°2	120°4	118°0	112°0	109°2	106°2	106°2	108°4	108°8	110°8	112°6
7	116°2	117°2	121°0	120°8	120°2	117°4	112°8	108°8	106°8	103°0	102°3	109°2	110°0
8	—	—	—	—	—	—	—	—	—	—	—	—	—
9	112°8	114°8	114°0	113°6	115°1	113°1	109°0	107°9	107°5	107°4	110°0	110°2	111°3
10	111°3	114°6	116°2	120°0	118°5	115°2	110°8	108°8	108°0	108°2	109°2	110°0	110°2
11	114°2	114°2	116°8	118°8	116°9	112°3	108°2	107°0	109°2	107°0	104°8	109°2	111°8
12	115°0	115°7	117°8	119°8	120°8	118°2	113°4	110°0	109°2	109°2	109°8	110°6	111°5
13	114°8	115°0	118°2	120°0	117°4	113°6	110°0	108°0	107°0	108°4	109°2	108°0	108°4
14	114°2	115°2	117°4	118°1	116°5	113°1	110°6	108°0	108°3	110°0	109°0	110°8	111°3
15	—	—	—	—	—	—	—	—	—	—	—	—	—
16	114°2	115°3	115°6	115°8	113°9	112°0	110°8	110°4	110°3	108°6	109°0	109°4	112°8
17	115°3	115°7	115°4	113°0	110°0	109°6	110°1	99°0	84°0	54°0	98°0	108°2	112°8
18	120°0	117°0	117°4	116°0	105°0	105°0	109°2	108°0	108°8	109°9	109°5	109°2	110°5
19	114°0	115°0	115°7	115°0	112°0	110°0	105°2	105°8	108°0	111°0	111°2	112°0	110°9
20	116°0	117°4	118°4	119°2	116°0	109°8	107°9	107°8	108°0	108°8	106°8	127°0	105°0
21	115°4	116°2	115°4	121°0	116°0	115°8	111°9	107°8	108°0	109°0	111°0	111°7	111°8
22	—	—	—	—	—	—	—	—	—	—	—	—	—
23	114°0	114°2	118°1	120°6	118°4	114°8	111°3	103°2	109°2	110°0	109°8	111°4	112°0
24	115°5	114°2	118°0	118°0	116°2	111°0	110°0	108°2	108°4	109°2	109°4	111°9	113°2
25	114°0	114°2	118°0	120°2	118°0	115°4	111°2	108°0	107°6	110°1	111°3	113°1	113°0
26	118°8	122°0	121°8	121°5	99°9	105°6	109°5	105°0	107°8	110°8	110°7	109°2	115°9
27	117°1	114°4	107°6	104°9	114°0	113°0	111°7	108°8	109°0	108°4	112°0	110°0	109°2
28	111°0	113°1	114°4	118°8	117°1	115°5	109°1	111°9	105°2	108°0	108°8	118°0	110°0
29	—	—	—	—	—	—	—	—	—	—	—	—	—
30	109°8	109°9	112°6	108°2	112°0	112°2	113°0	110°2	109°0	111°0	112°1	113°6	114°2
Hourly Means	114°61	114°91	115°44	116°42	114°73	112°15	109°77	107°43	107°10	108°30	109°14	111°33	111°41
DECEMBER.													
1	114°7	118°2	116°0	116°0	116°9	112°4	109°2	108°0	108°5	111°0	111°4	111°2	110°
2	118°4	117°5	109°2	115°8	114°2	109°5	108°1	107°0	109°0	111°2	112°0	113°3	114°7
3	115°5	115°6	113°6	116°8	115°9	113°8	111°5	110°0	110°8	110°2	111°2	110°7	112°0
4	116°0	112°0	114°2	116°4	112°1	105°1	104°0	105°2	104°4	106°2	111°2	116°2	117°0
5	118°5	119°3	117°2	118°3	115°0	112°2	106°3	106°0	105°4	106°6	111°3	112°9	114°1
6	—	—	—	—	—	—	—	—	—	—	—	—	—
7	117°0	116°2	118°0	118°0	116°2	114°6	111°2	108°8	107°6	108°0	110°0	112°0	113°0
8	115°0	117°4	118°7	119°0	118°6	115°8	112°5	109°4	108°4	109°8	110°7	112°3	112°7
9	115°4	116°3	118°6	120°7	120°5	116°0	112°0	108°5	107°9	108°0	106°2	108°2	101°6
10	113°2	114°8	116°0	119°0	117°8	116°1	112°2	111°0	109°4	108°0	109°2	115°5	115°4
11	113°4	108°9	118°8	115°3	117°2	115°2	111°2	109°8	109°2	109°2	109°7	110°9	112°4
12	116°7	117°0	119°2	118°6	117°1	117°2	113°6	110°8	110°1	109°0	109°2	113°0	114°2
13	—	—	—	—	—	—	—	—	—	—	—	—	—
14	111°0	115°2	115°4	115°8	115°8	115°0	112°9	112°0	109°9	109°9	110°3	113°7	111°7
15	113°3	116°6	118°1	118°5	117°3	114°3	112°7	111°8	111°1	110°6	111°9	111°2	112°6
16	115°9	115°9	116°4	118°3	119°0	117°0	113°1	110°8	109°0	110°0	111°4	113°8	113°6
17	115°0	115°4	116°3	117°0	117°0	115°4	111°1	110°0	110°0	111°0	110°8	111°9	113°2
18	117°6	117°8	117°0	120°0	117°5	113°8	111°4	108°1	109°6	109°9	110°0	111°5	111°7
19	115°5	115°8	117°4	118°5	117°1	114°8	111°1	109°0	108°6	109°4	111°5	111°2	112°0
20	—	—	—	—	—	—	—	—	—	—	—	—	—
21	113°9	115°1	114°3	118°7	117°4	113°0	111°0	109°9	110°0	111°0	111°8	114°7	114°0
22	115°0	116°2	116°0	120°0	117°0	113°8	110°0	109°7	110°0	110°2	111°0	111°6	111°4
23	114°0	116°8	117°5	120°0	114°8	109°0	107°4	110°0	105°4	107°0	107°0	107°5	110°1
24	111°2	116°5	118°1	117°4	120°0	115°0	112°0	110°0	109°2	110°3	112°1	114°0	115°0
25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
26	111°2	115°4	114°2	115°2	112°6	110°7	110°0	109°0	109°2	110°0	111°2	113°0	114°0
27	—	—	—	—	—	—	—	—	—	—	—	—	—
28	112°8	113°3	114°8	115°0	116°2	115°2	113°2	112°4	110°6	112°0	111°3	112°0	112°9
29	113°0	114°2	115°0	116°8	117°0	113°8	111°2	109°2	109°2	110°8	112°7	113°5	113°0
30	113°4	116°0	115°0	117°4	115°2	111°2	108°8	108°0	109°0	110°0	111°2	112°0	113°8
31	114°0	114°8	116°2	116°5	114°0	111°9	110°8	110°6	111°7	112°0	112°2	113°8	114°0
Hourly Means	114°87	115°51	116°20	117°65	116°52	113°53	110°71	109°42	108°97	109°67	110°70	112°37	112°71

<sup>a</sup> Christmas Day.



		DECLINATION.											
		Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.											
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.	
122°0	114°0	116°6	112°8	113°5	113°0	116°0	111°0	112°0	112°4	106°2	113°2	109°90	
112°1	111°7	113°2	113°6	113°4	111°0	113°0	113°4	114°2	114°0	114°2	114°4	112°19	
110°2	112°0	115°5	117°2	116°8	117°0	115°0	114°2	110°0	117°9	115°1	116°1	113°31	
112°5	113°9	113°8	114°1	113°5	113°7	118°8	109°0	112°2	115°2	114°2	113°0	112°72	
112°6	112°0	120°6	117°9	113°0	116°8	115°8	115°0	115°2	118°0	116°1	116°0	114°12	
110°0	119°7	117°0	115°0	113°0	113°0	—	—	—	—	—	—	—	
111°3	112°0	112°8	112°6	115°0	114°2	113°2	113°7	113°2	113°8	113°8	113°1	113°41	
110°2	116°0	112°9	112°5	113°2	113°5	113°4	113°1	112°4	113°1	113°1	113°7	112°11	
111°8	111°4	112°3	112°4	113°2	113°1	112°8	112°1	112°0	113°8	114°0	114°0	112°15	
111°5	112°1	113°1	113°0	112°8	113°3	112°0	112°2	113°0	113°6	114°0	114°4	113°52	
108°4	112°1	111°7	111°3	115°8	115°1	115°6	114°0	115°0	113°2	115°2	97°4	112°27	
111°3	112°0	112°2	112°8	112°0	112°7	—	—	—	—	—	—	—	
112°8	112°0	112°8	113°0	113°0	112°8	115°0	113°0	113°2	112°1	110°5	113°9	112°43	
112°8	113°0	111°8	116°1	116°3	115°8	122°0	122°0	111°9	116°0	124°9	103°4	110°39	
110°5	111°9	114°6	112°2	113°0	113°0	111°0	113°0	113°0	113°0	113°5	114°3	112°00	
110°9	111°0	114°2	115°5	114°2	113°9	112°6	112°2	112°0	114°0	115°2	113°8	112°27	
105°0	116°5	110°0	113°8	114°2	113°0	114°4	109°2	109°5	113°0	115°2	115°4	113°01	
111°8	113°4	113°8	127°2	113°4	113°2	—	—	—	—	—	—	—	
112°0	113°4	114°0	114°9	114°0	113°4	112°2	109°4	113°1	112°8	114°4	116°2	113°75	
113°2	113°8	114°1	113°1	113°7	113°9	112°9	113°0	112°4	113°5	113°7	115°0	113°43	
113°0	114°2	114°0	114°9	115°1	114°5	111°6	111°0	113°6	113°0	113°4	118°8	113°02	
115°9	117°1	111°1	119°0	123°0	123°0	117°6	116°0	95°4	112°2	123°6	118°1	114°07	
109°2	140°0	118°2	117°2	120°0	116°5	116°2	110°1	109°2	110°5	107°8	106°1	112°87	
110°0	132°2	114°4	127°2	113°5	112°8	—	—	—	—	—	—	—	
114°2	114°1	120°1	114°3	115°0	114°8	110°8	106°2	114°2	114°4	115°0	113°3	113°95	
114°1	113°8	—	—	—	—	113°8	105°0	112°9	115°3	114°1	114°0	112°55	
111°41	115°26	114°19	115°32	114°54	114°24	114°31	112°31	111°90	113°76	114°38	113°17	112°76	
116°	115°7	111°2	117°0	117°8	112°3	117°0	115°6	115°0	112°3	115°0	105°8	113°37	
114°7	111°0	114°0	113°8	114°0	115°7	113°0	113°0	115°2	112°2	113°4	111°9	113°05	
112°3	113°2	114°2	111°2	111°2	113°4	111°6	113°0	112°9	113°1	116°4	115°2	113°84	
117°0	118°4	119°0	119°8	126°4	118°2	116°7	116°0	116°0	114°2	117°0	118°0	114°16	
114°1	115°1	115°9	116°0	115°4	115°4	—	—	—	—	—	—	—	
113°0	114°3	114°2	114°0	111°3	114°0	115°0	112°0	114°2	113°8	114°8	114°2	113°54	
112°7	113°5	113°0	116°0	115°2	115°8	115°0	114°8	113°1	114°0	113°2	113°8	114°0	
101°6	103°0	125°0	120°2	128°0	124°4	120°8	109°7	113°0	113°7	112°3	113°9	114°29	
115°1	115°0	115°8	119°3	116°2	118°8	117°2	117°0	112°9	115°1	114°5	110°6	114°37	
112°4	112°7	117°0	119°2	118°2	117°7	116°0	115°2	121°8	123°0	118°8	118°0	114°95	
114°2	113°6	115°1	115°2	130°8	116°0	—	—	—	—	—	—	—	
111°7	112°2	113°2	115°3	115°8	116°0	114°0	114°4	115°2	115°8	116°0	114°2	115°25	
112°6	112°0	116°2	115°0	115°1	115°0	114°2	115°1	113°9	115°6	115°7	116°0	114°21	
113°6	113°8	114°8	114°3	114°1	114°5	114°1	114°2	111°6	114°7	115°0	115°0	114°32	
113°2	112°9	120°6	114°0	114°9	114°7	114°0	114°8	115°2	115°2	118°1	117°8	114°43	
111°7	115°8	114°7	114°7	116°0	115°5	115°8	115°0	115°0	115°4	115°2	115°0	114°33	
112°0	112°2	114°0	114°4	113°0	114°0	—	—	—	—	—	—	—	
114°0	112°2	113°8	115°0	116°4	113°0	117°4	113°0	113°0	113°0	113°2	113°1	113°42	
111°4	113°5	115°0	114°4	115°4	115°6	114°2	113°6	113°7	114°8	115°5	115°7	113°78	
110°1	114°0	123°9	123°8	122°7	118°2	114°0	114°5	114°7	115°0	117°8	117°0	114°16	
115°0	116°0	116°2	117°0	119°6	116°2	—	—	—	—	—	—	—	
114°0	115°0	119°8	115°9	118°1	115°0	114°1	111°2	112°0	114°0	112°9	111°2	114°22	
112°0	115°0	—	—	—	—	113°0	114°0	113°2	115°4	115°0	112°0	113°55	
112°9	115°0	115°4	114°8	114°7	113°0	114°0	112°2	112°9	113°7	113°0	112°8	113°47	
113°0	114°7	111°5	114°2	114°0	113°7	112°3	112°0	112°8	113°2	114°0	111°2	113°29	
113°8	114°0	114°0	114°0	113°7	113°4	112°2	112°5	113°5	113°4	114°2	114°1	112°92	
114°0	114°2	114°6	115°0	114°2	113°8	113°2	113°1	112°9	113°9	114°3	114°2	113°58	
112°71	114°46	116°08	116°02	117°21	115°32	114°77	114°00	114°43	114°63	115°08	114°03	113°96	

112°56

113°27

114°24

113°81

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JANUARY.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
	1	114.8	115.8	116.0	116.7	115.6	112.2	109.8	109.2	110.0	110.4	113.2	114.2
	2	114.0	116.2	119.2	116.2	114.5	111.8	108.6	108.4	110.0	109.2	111.8	112.5
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	117.0	116.4	118.2	119.0	118.6	112.2	107.7	106.0	106.2	110.0	111.1	110.0
	5	116.0	116.5	118.1	120.1	117.1	114.5	112.3	110.2	110.0	111.0	112.1	112.1
	6	113.1	117.5	120.8	122.8	120.7	117.1	110.2	107.8	107.0	109.8	112.8	114.7
	7	114.9	116.0	119.3	120.1	117.0	113.0	109.6	108.0	108.0	109.6	113.0	115.0
	8	115.0	115.9	117.5	121.2	116.4	111.3	109.2	109.2	108.8	110.8	112.6	113.5
	9	115.4	115.4	117.7	119.0	117.1	113.2	109.8	108.5	107.2	105.9	108.0	112.2
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	115.4	114.2	120.0	121.0	112.1	108.5	106.8	106.9	106.4	110.0	112.6	112.0
	12	115.7	117.7	109.1	120.2	119.1	114.3	111.2	107.8	107.1	108.0	110.8	112.0
	13	112.0	112.2	116.8	116.8	115.0	116.8	115.0	110.7	107.0	108.2	110.0	112.2
	14	115.0	114.0	116.9	117.2	115.7	111.4	109.0	109.2	108.8	111.8	112.8	116.5
	15	113.8	114.0	115.4	116.2	113.7	112.0	109.2	108.0	108.4	110.5	111.4	112.3
	16	112.0	116.0	117.2	117.8	115.4	114.1	111.2	108.4	110.1	111.1	112.1	112.1
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	114.9	115.0	116.5	116.0	115.0	112.9	110.7	109.1	111.1	111.9	111.9	112.2
	19	115.8	115.7	117.0	117.0	114.0	111.9	109.2	109.7	113.0	115.0	115.0	115.2
	20	116.0	113.0	118.2	120.0	111.2	118.2	108.7	110.0	113.4	115.0	113.7	113.0
	21	117.0	118.8	118.1	115.6	113.8	110.0	107.0	109.0	112.0	113.0	116.6	115.3
	22	119.2	119.5	116.0	115.0	114.7	112.1	110.8	109.0	112.1	112.6	113.0	113.3
	23	117.0	117.9	118.9	118.0	117.0	115.1	112.0	111.1	112.1	113.2	113.2	114.0
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	116.0	116.4	118.0	120.0	117.1	116.0	115.0	109.0	109.2	112.0	113.0	114.0
	26	111.8	115.3	118.0	117.0	118.8	116.4	115.0	112.2	111.2	112.0	112.8	112.6
	27	117.3	116.8	116.3	115.0	114.1	114.4	112.6	111.8	110.8	111.8	112.3	113.1
	28	115.0	115.8	117.2	117.4	115.5	116.2	115.5	114.0	113.8	113.5	112.0	112.8
	29	120.4	111.1	112.3	111.5	111.7	109.9	111.5	108.6	107.2	105.8	105.8	105.0
	30	114.4	115.0	117.0	115.3	113.8	115.5	117.0	111.3	108.0	102.2	111.2	107.2
31	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	115.46	115.70	117.26	117.77	115.71	113.16	110.58	109.21	109.66	110.66	112.26	112.65	
FEBRUARY.	1	113.0	112.9	115.7	110.0	105.2	107.8	108.2	109.3	112.2	112.6	112.3	111.3
	2	113.8	117.0	116.2	113.0	110.2	106.8	105.2	105.5	108.2	110.2	112.2	111.7
	3	115.2	119.4	119.0	117.0	111.7	106.1	103.9	101.8	107.5	102.9	110.6	111.2
	4	116.0	116.6	118.0	114.7	112.6	108.8	106.9	108.0	108.3	112.0	112.9	112.4
	5	113.8	114.4	116.6	115.1	112.6	110.2	108.0	108.0	109.3	111.6	112.3	112.0
	6	119.3	114.7	123.5	111.0	110.4	93.6	101.2	103.8	103.6	106.1	105.1	109.1
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	112.8	114.1	115.0	112.0	115.0	114.0	108.8	107.2	107.7	110.1	108.0	111.0
	9	115.0	115.8	117.0	115.0	113.1	111.1	108.0	108.4	106.1	105.9	105.9	107.7
	10	113.8	114.6	116.8	115.0	115.0	112.3	111.0	108.2	109.4	108.2	109.0	109.2
	11	116.0	115.4	116.7	115.0	112.0	110.0	109.0	108.2	108.4	108.2	109.7	110.2
	12	113.0	115.0	115.2	117.2	115.5	111.0	111.0	108.9	107.4	108.8	107.4	107.1
	13	113.0	113.4	113.0	112.0	111.1	109.8	109.8	109.9	110.0	110.1	111.0	110.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	114.0	114.8	112.5	111.0	109.2	107.6	107.1	107.9	109.5	109.5	110.8	111.0
	16	118.6	115.6	109.5	109.1	108.1	108.2	106.1	107.0	108.9	110.2	112.0	115.0
	17	114.3	115.0	116.3	113.5	112.0	107.2	104.7	105.2	108.0	111.0	110.3	110.0
	18	118.0	119.1	122.0	120.0	117.2	111.0	107.0	107.0	107.4	107.8	109.7	110.8
	19	110.2	117.0	118.7	117.2	115.9	111.4	109.0	106.0	106.0	107.6	109.5	110.0
	20	113.5	115.8	113.0	115.0	112.1	108.7	106.6	104.2	101.0	106.4	106.9	107.9
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	116.8	114.1	106.3	100.5	103.0	110.2	107.9	104.7	105.3	106.0	103.1	106.2
	23	115.2	115.2	111.1	114.0	114.0	112.0	107.2	106.6	108.0	108.2	109.0	108.8
	24	109.7	117.1	114.0	108.0	110.4	112.2	108.2	108.2	102.2	106.0	104.2	111.2
	25	113.0	110.0	116.0	115.0	110.2	110.2	103.0	108.3	106.1	105.1	107.6	110.0
	26	115.0	114.0	117.4	116.7	111.0	111.2	107.7	106.7	110.2	108.0	110.0	116.0
	27	112.9	113.1	116.0	116.0	115.4	113.4	102.8	102.5	101.1	106.7	110.2	110.2
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	114.41	115.18	115.78	113.46	111.79	108.91	107.14	106.85	107.41	108.40	109.15	110.42	

\* Twenty minutes late.

\* Twelve minutes late.

\* Ten minutes late.

12h.  
Sc. Div.  
115.0  
114.7  
—  
111.1  
112.9  
115.0  
115.0  
114.4  
113.0  
—  
114.0  
112.0  
112.0  
111.4  
113.4  
113.0  
112.0  
112.0  
115.2  
117.1  
114.2  
114.0  
114.2  
—  
111.2  
113.1  
111.7  
113.0  
101.2  
111.2  
113.00  
110.9  
111.5  
111.8  
112.0  
112.0  
120.0  
—  
110.0  
114.8  
110.3  
111.2  
108.1  
110.7  
111.2  
113.2  
114.0  
110.8  
111.2  
114.0  
110.8  
110.4  
110.0  
110.0  
110.0  
111.2  
110.6  
110.0  
111.2  
112.0  
117.0  
111.0  
111.82



DECLINATION.													12h.	
Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.														
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.		
MARCH.	1	116° 8	120° 7	124° 9	121° 0	110° 7	107° 5	102° 5	95° 9	95° 7	95° 9	96° 7	97° 1	98° 9
	2	113° 0	114° 5	117° 9	118° 5	116° 2	111° 0	106° 7	104° 5	104° 9	106° 9	108° 6	109° 5	109° 7
	3	112° 9	114° 9	117° 4	117° 3	116° 2	113° 7	108° 9	105° 8	104° 8	105° 9	108° 3	109° 7	109° 4
	4	113° 7	115° 3	116° 7	117° 3 <sup>a</sup>	115° 2	107° 8	104° 9	101° 1	102° 7	101° 7	100° 9	99° 7	97° 4
	5	112° 2	116° 1	116° 8	118° 0	114° 7	111° 0	106° 7	103° 7	104° 7	105° 0	106° 5	106° 7	107° 0
	6	114° 1	116° 9	114° 4	120° 8	117° 7	113° 4	108° 9	105° 1	103° 1	103° 3	105° 4	107° 8	108° 2
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	108° 7	112° 8	117° 0	115° 8	112° 0	109° 5	104° 5	102° 0	102° 2	99° 4	102° 4	104° 7	110° 4
	9	114° 8	109° 0	101° 5	115° 0	117° 2	113° 8	109° 2	107° 6	105° 2	106° 7	107° 6	108° 0	111° 0
	10	110° 0	110° 0	117° 2	117° 0	114° 0	106° 7	104° 5	101° 0	108° 8	102° 0	102° 7	106° 0	108° 3
	11	116° 5	117° 7	116° 9	116° 9	114° 0	108° 0	105° 0	102° 8	103° 1	103° 8	103° 8	106° 3	110° 8
	12	113° 6	115° 0	117° 3	117° 8	117° 0	112° 8	107° 3	103° 8	103° 0	102° 8	104° 0	104° 2	106° 6
	13	118° 0	119° 2	120° 0	118° 7	116° 0	111° 8	107° 0	103° 6	103° 2	103° 0	103° 0	101° 3	103° 4
	14	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	115° 2	118° 0	121° 8	118° 8	117° 1	109° 2	103° 2	102° 2	101° 5	104° 0	106° 9	109° 0	110° 2
	16	114° 4	116° 5	116° 2	115° 9	111° 9	105° 8	101° 9	101° 0	101° 9	105° 0	107° 8	109° 8	110° 0
	17	113° 5	117° 5	119° 1	121° 0	118° 7	112° 6	105° 0	100° 3	100° 0	101° 7	105° 0	108° 4	110° 2
	18	111° 2	116° 0	120° 0	120° 7	117° 8	107° 9	99° 8	97° 2	99° 8	100° 8	105° 2	108° 0	109° 2
	19 <sup>d</sup>	119° 0	64° 0	74° 2	102° 8	107° 7	102° 0	106° 3	104° 6	103° 8	124° 1	116° 8	104° 4	130° 5
	20	109° 2	115° 2	122° 0	117° 2	114° 0	111° 2	107° 8	105° 9	105° 1	105° 4	107° 8	110° 0	108° 0
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	114° 8	116° 4	119° 0	118° 2	115° 2	112° 8	108° 1	104° 0	103° 0	102° 5	104° 3	105° 0	106° 2
	23	114° 0	115° 0	113° 8	114° 2	111° 2	106° 0	102° 9	100° 2	99° 5	100° 1	102° 1	104° 0	102° 2
	24	111° 0	116° 0	108° 0	111° 2	109° 7	109° 2	104° 8	102° 7	103° 0	108° 4	104° 2	103° 0	117° 0
	25	110° 4	111° 2	113° 0	115° 1	113° 9	109° 2	105° 4	101° 9	101° 0	102° 4	104° 0	108° 7	108° 0
	26	114° 0	112° 2	114° 2	115° 4	113° 1	108° 8	105° 0	102° 7	101° 9	104° 0	103° 1	105° 0	107° 0
	27	110° 2	112° 8	113° 8	115° 2	111° 5	105° 9	102° 6	103° 0	105° 3	106° 2	106° 8	107° 7	108° 0
	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	112° 4	115° 1	117° 2	117° 2	112° 8	106° 4	101° 3	100° 3	101° 4	103° 0	105° 0	108° 0	110° 0
	30	118° 6	117° 8	122° 0	117° 7	115° 0	107° 6	103° 2	100° 0	101° 4	104° 0	107° 2	109° 8	111° 8
	31	115° 0	118° 8	119° 9	118° 6	114° 8	107° 6	101° 4	100° 2	101° 8	105° 4	108° 9	111° 8	110° 0
Hourly Means	113° 39	115° 18	116° 85	117° 33	114° 52	109° 51	104° 91	102° 25	102° 62	103° 28	104° 89	106° 51	108° 11	
APRIL.	1	116° 0	116° 4	113° 0	118° 6	116° 4	109° 8	105° 0	102° 8	103° 2	104° 0	105° 5	109° 1	110° 0
	2 <sup>1</sup>	—	—	—	—	—	—	—	—	—	—	—	—	101° 0
	3	107° 6	115° 2	115° 7	110° 0	104° 0	107° 9	96° 9	91° 6	96° 0 <sup>4</sup>	94° 8	97° 8	107° 2	—
	4	—	—	—	—	—	—	—	—	—	—	—	—	—
	5	115° 0	119° 0	119° 8	118° 8	116° 0	109° 4	103° 0	100° 8	100° 9	105° 0	108° 8	111° 9	115° 0
	6	116° 2	118° 0	121° 4	120° 0	114° 8	105° 4	102° 0	100° 2	101° 6	104° 0	105° 7	108° 8	107° 8
	7 <sup>b</sup>	111° 2	120° 0	121° 8	119° 9	116° 1	108° 1	101° 6	100° 6	95° 0	101° 1	98° 3	101° 4	105° 4
	8	126° 6	122° 2	121° 4	119° 4	112° 8	108° 2	105° 6	103° 1	106° 0	107° 6	109° 4	109° 8	112° 8
	9	118° 2	121° 0	120° 0	117° 5	113° 4	106° 2	103° 4	103° 0	105° 2	109° 0	109° 4	109° 6	112° 8
	10	111° 8	117° 1	116° 4	115° 4	110° 6	105° 0	102° 6	103° 2	103° 2	105° 4	109° 6	110° 1	118° 0
	11	—	—	—	—	—	—	—	—	—	—	—	—	—
	12	115° 8	118° 0	117° 2	118° 2	111° 8	107° 8	102° 6	101° 4	99° 8	101° 5	97° 6	109° 7	110° 4
	13	116° 0	117° 0	115° 0 <sup>5</sup>	114° 4	110° 0	104° 2	105° 6	100° 4	101° 4	103° 7	108° 0	107° 3	108° 6
	14	117° 0	118° 4	117° 4	115° 2	110° 7	103° 2	98° 4	97° 2	97° 2	99° 4	101° 6	102° 0	106° 6
	15	114° 4	117° 0	116° 3	116° 2	109° 1	101° 0	96° 6	97° 4	99° 4	102° 2	105° 4	109° 2	107° 8
	16	121° 6	123° 6	121° 4	116° 0	110° 4	101° 0	101° 4	95° 8	97° 4	99° 2	105° 9	108° 8	110° 8
	17	109° 6	109° 7	116° 6	121° 4	117° 1	108° 6	102° 2	99° 5	100° 4	103° 6	106° 5	109° 4	112° 4
	18	—	—	—	—	—	—	—	—	—	—	—	—	—
	19	115° 4	118° 2	119° 4	118° 1	113° 6	109° 5	105° 0	101° 4	101° 4	102° 7	104° 7	106° 5	108° 0
	20 <sup>b</sup>	105° 9	92° 1	89° 1	91° 6	95° 8	91° 8	101° 3	90° 2	93° 0	88° 0	98° 6	98° 6	101° 8
	21 <sup>b</sup>	111° 0	72° 6	75° 9	91° 4	92° 6	99° 2	101° 0	102° 6	103° 2	100° 0	101° 6	128° 4	126° 4
	22	112° 7	113° 2	113° 9	110° 5	110° 2	107° 0	103° 7	100° 6	106° 5	102° 4	104° 4	111° 7	108° 3
	23	112° 8	112° 8	112° 0	112° 2	110° 2	105° 1	102° 8	103° 0	102° 5	103° 6	104° 6	107° 0	111° 0
	24	113° 4	113° 2	113° 4	111° 2	108° 3	104° 3	101° 4	101° 6	103° 4	105° 6	107° 6	109° 4	110° 4
	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	119° 3	119° 5	116° 3	113° 9	110° 8	107° 1	104° 6	102° 7	105° 4	108° 9	109° 5	110° 0	110° 2
	27	117° 9	120° 4	119° 6	117° 5	107° 4	106° 4	103° 9	102° 4	102° 0	103° 0	107° 4	108° 8	110° 4
	28	118° 2	118° 0	115° 0	110° 6	110° 1	103° 5	99° 2	103° 0	103° 4	105° 7	107° 4	108° 4	108° 6
	29	120° 0	123° 4	123° 0	117° 8	113° 6	101° 4	101° 9	104° 0	103° 8	106° 8	115° 0	119° 3	109° 0
	30	111° 6	112° 7	118° 6	113° 4	115° 5	106° 5	101° 3	101° 6	99° 5	104° 3	107° 1	113° 2	108° 4
	Hourly Means	115° 94	117° 42	117° 30	115° 63	111° 60	105° 82	102° 21	100° 89	101° 91	103° 80	106° 49	109° 51	109° 63

<sup>c</sup> Good Friday.

<sup>a</sup> 5 minutes late.  
<sup>b</sup> Four minutes late.

<sup>d</sup> Twelve minutes late.  
<sup>e</sup> Omitted in the Means, on account of the great influence of disturbance on those days.

Five minutes late.



DECLINATION.													12h.	
Angular Value of one Scale Division of the Declinometer = 0'' 721. Increasing Numbers denote decreasing Westerly Declination.														
Mean Cöttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.		
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
MAY.	1	115° 8'	119° 4'	121° 8'	120° 0'	117° 4'	110° 8'	107° 3'	107° 0'	105° 4'	109° 5'	106° 4'	109° 4'	118° 0'
	2	—	—	—	—	—	—	—	—	—	—	—	—	109° 2'
	3	114° 9'	115° 5'	115° 2'	113° 4'	112° 8'	107° 2'	104° 3'	102° 0'	103° 0'	104° 4'	106° 6'	109° 4'	112° 0'
	4	115° 4'	118° 4'	119° 4'	117° 0'	111° 6'	105° 0'	101° 8'	99° 2'	99° 4'	101° 7'	101° 2'	107° 9'	110° 6'
	5	116° 6'	118° 2'	119° 6'	117° 8'	112° 4'	105° 6'	101° 2'	99° 4'	99° 2'	100° 8'	103° 4'	106° 6'	112° 4'
	6	116° 6'	116° 8'	119° 2'	119° 2'	115° 5'	110° 0'	107° 4'	105° 2'	103° 9'	105° 3'	107° 7'	111° 0'	111° 2'
	7 <sup>a</sup>	120° 0'	117° 4'	119° 2'	118° 0'	114° 4'	110° 4'	107° 4'	106° 5'	104° 4'	105° 6'	106° 4'	108° 3'	111° 2'
	8	94° 4'	95° 6'	101° 5'	98° 8'	106° 2'	103° 0'	109° 2'	112° 6'	111° 8'	114° 0'	114° 4'	114° 4'	114° 8'
	9	—	—	—	—	—	—	—	—	—	—	—	—	109° 2'
	10	118° 7'	118° 4'	118° 6'	112° 2'	108° 8'	106° 0'	101° 2'	104° 4'	101° 6'	105° 4'	106° 6'	108° 9'	107° 8'
	11	115° 0'	116° 6'	115° 0'	110° 4'	106° 5'	105° 4'	101° 2'	101° 6'	101° 7'	107° 5'	107° 8'	108° 4'	111° 0'
	12	116° 8'	116° 4'	114° 2'	110° 7'	105° 2'	100° 0'	97° 8'	97° 4'	100° 0 <sup>b</sup>	102° 6'	106° 4'	109° 4'	110° 4'
	13	118° 0'	120° 0'	118° 1'	111° 2'	106° 4'	100° 4'	96° 4'	96° 6'	99° 3'	102° 6'	106° 6'	110° 3'	107° 8'
	14	118° 0'	120° 2'	119° 9'	116° 4'	111° 2'	104° 2'	100° 4'	101° 2'	103° 4'	104° 0'	106° 6'	107° 8'	108° 4'
	15	131° 4'	128° 5'	128° 4'	117° 5'	108° 6'	91° 7'	97° 3'	92° 3'	96° 9'	99° 3'	107° 5'	108° 3'	108° 4'
	16	—	—	—	—	—	—	—	—	—	—	—	—	109° 8'
	17	116° 8'	118° 8'	118° 8'	118° 4'	113° 6'	105° 4'	104° 3'	105° 4'	101° 4'	100° 4'	104° 0'	106° 4'	110° 8'
	18	120° 5'	122° 9'	121° 2'	119° 4'	118° 5'	112° 3'	107° 0'	106° 1'	104° 4'	105° 0'	106° 4'	109° 4'	110° 3'
	19	121° 3'	117° 6'	118° 0'	117° 4'	112° 4'	110° 0'	108° 0'	105° 6'	104° 1'	101° 0'	106° 4'	108° 0'	108° 8'
	20	119° 4'	120° 4'	116° 0'	112° 4'	103° 6'	100° 0'	105° 4'	101° 0'	101° 4'	107° 6'	104° 4'	116° 0'	113° 6'
	21	117° 6'	118° 8'	118° 6'	116° 0'	112° 4'	103° 8'	102° 4'	100° 0'	100° 8'	101° 3'	105° 8'	113° 4'	111° 0'
	22	116° 8'	118° 6'	118° 4'	117° 4'	112° 0'	106° 4'	104° 8'	103° 3'	104° 4'	106° 3'	107° 5'	110° 4'	107° 8'
	23	—	—	—	—	—	—	—	—	—	—	—	—	107° 5'
	24	115° 0'	116° 8'	115° 2'	112° 8'	109° 6'	106° 1'	103° 8'	102° 0'	102° 4'	104° 4'	105° 8'	107° 3'	109° 3'
	25	117° 6'	118° 4'	117° 5'	114° 5'	109° 8'	106° 0'	105° 4'	102° 4'	102° 4'	104° 4'	106° 4'	108° 3'	112° 2'
	26	122° 9'	122° 4'	120° 8'	118° 4'	114° 4'	105° 6'	103° 2'	101° 6'	104° 7'	108° 0'	111° 4'	112° 5'	108° 4'
	27	124° 0'	122° 4'	121° 4'	118° 8'	112° 2'	105° 0'	103° 4'	101° 4'	101° 2'	102° 4'	106° 8'	104° 5'	111° 9'
	28 <sup>a</sup>	118° 7'	115° 4'	116° 2'	115° 5'	107° 4'	105° 5'	101° 4'	105° 4'	100° 4'	101° 9'	105° 9'	108° 0'	110° 4'
	29	121° 7'	121° 9'	122° 5'	119° 4'	105° 6'	101° 2'	102° 8'	103° 0'	101° 8'	106° 0'	106° 6'	109° 0'	110° 4'
	30	—	—	—	—	—	—	—	—	—	—	—	—	110° 4'
	31	116° 6'	117° 4'	117° 3'	116° 3'	111° 4'	111° 4'	107° 4'	105° 4'	105° 0'	104° 6'	107° 4'	108° 2'	111° 0'
Hourly Means	117° 70	118° 35	118° 19	115° 37	110° 88	105° 35	103° 72	102° 05	102° 86	104° 77	106° 80	109° 38	111° 00	
JUNE.	1	120° 0'	122° 0'	118° 8'	115° 4'	112° 5'	104° 8'	102° 4'	94° 8'	98° 8'	101° 0'	102° 4'	105° 8'	114° 0'
	2	111° 5'	116° 0'	117° 4'	116° 4'	112° 2'	107° 4'	103° 8'	105° 6'	102° 2'	102° 8'	102° 8'	106° 4'	108° 2'
	3	118° 2'	117° 6'	117° 0'	116° 4'	114° 1'	110° 1'	105° 6'	102° 5'	103° 7'	105° 1'	105° 7'	108° 4'	108° 0'
	4	114° 4'	116° 8'	117° 4'	114° 8'	110° 2'	106° 4'	109° 4'	103° 2'	101° 1'	104° 6'	105° 4'	106° 6'	108° 4'
	5	117° 4'	119° 8'	117° 6'	116° 4'	111° 4'	105° 4'	102° 7'	101° 8'	102° 4'	101° 4'	107° 6'	109° 0'	109° 2'
	6	—	—	—	—	—	—	—	—	—	—	—	—	110° 5'
	7	120° 4'	119° 0'	121° 5'	119° 2'	114° 0'	105° 2'	102° 0'	101° 6'	103° 0'	107° 4'	108° 4'	110° 5'	110° 5'
	8	122° 2'	124° 2'	121° 6'	115° 0'	111° 1'	107° 0'	103° 9'	104° 0'	101° 2'	105° 6'	108° 7'	112° 0'	110° 8'
	9	120° 5'	119° 9'	118° 7'	115° 8'	106° 8'	101° 2'	103° 0'	102° 0'	101° 3'	102° 2'	102° 8'	105° 6'	110° 7'
	10	117° 2'	113° 0'	116° 0'	112° 5'	111° 1'	103° 4'	91° 7'	98° 2'	102° 6'	105° 4'	106° 1'	108° 3'	107° 0'
	11	118° 8'	119° 4'	119° 2'	118° 6'	109° 6'	112° 2'	103° 9'	102° 6'	102° 6'	99° 8'	102° 2'	108° 4'	110° 8'
	12	121° 4'	123° 2'	122° 4'	117° 0'	113° 4'	109° 2'	103° 4'	102° 6'	98° 6'	97° 4'	101° 6'	100° 5'	99° 0'
	13	—	—	—	—	—	—	—	—	—	—	—	—	105° 4'
	14	116° 2'	109° 1'	114° 9'	112° 1'	110° 8'	110° 4'	108° 2'	99° 5'	102° 2'	106° 4'	107° 2'	111° 0'	106° 4'
	15	120° 4'	120° 4'	122° 8'	121° 8'	121° 4'	112° 1'	106° 7'	103° 4'	102° 5'	101° 0'	103° 0'	104° 4'	108° 0'
	16	115° 5'	115° 6'	118° 5'	115° 8'	112° 9'	105° 4'	102° 9'	100° 6'	103° 6'	104° 6'	106° 6'	105° 2'	109° 2'
	17	122° 6'	119° 5'	119° 6'	116° 4'	115° 8'	109° 2'	101° 6'	101° 4'	102° 4'	102° 6'	102° 6'	107° 4'	109° 2'
	18	113° 6'	118° 4'	118° 4'	117° 4'	114° 4'	111° 0'	106° 0'	100° 8'	101° 6'	102° 4'	110° 8'	110° 9'	112° 8'
	19	116° 8'	119° 0'	119° 8'	117° 8'	112° 2'	106° 6'	103° 0'	101° 9'	101° 2'	102° 5'	105° 3'	109° 0'	109° 2'
	20	—	—	—	—	—	—	—	—	—	—	—	—	104° 4'
	21	119° 9'	121° 2'	121° 2'	120° 4'	117° 4'	110° 2'	103° 7'	100° 4'	98° 3'	98° 4'	105° 2'	102° 4'	111° 0'
	22	115° 4'	122° 3'	122° 0'	119° 7'	117° 4'	107° 3'	103° 5'	101° 3'	101° 4'	102° 4'	105° 0'	109° 6'	109° 4'
	23	115° 1'	119° 0'	119° 6'	119° 4'	115° 8'	109° 4'	104° 6'	99° 0'	98° 8'	101° 8'	105° 5'	106° 9'	109° 4'
	24	115° 5'	117° 4'	117° 8'	115° 5'	111° 4'	106° 4'	102° 5'	102° 4'	103° 4'	105° 4'	107° 0'	110° 1'	110° 4'
	25	114° 9'	116° 2'	115° 9'	113° 5'	109° 6'	106° 8'	103° 6'	101° 4'	102° 0'	105° 4'	107° 4'	107° 4'	107° 6'
	26	118° 8'	117° 4'	117° 4'	117° 8'	109° 0'	102° 6'	100° 4'	103° 4'	101° 4'	105° 4'	106° 4'	110° 0'	112° 6'
	27	—	—	—	—	—	—	—	—	—	—	—	—	114° 0'
	28	119° 9'	119° 6'	118° 9'	115° 4'	112° 6'	111° 3'	107° 4'	100° 7'	104° 4'	104° 2'	107° 4'	112° 2'	114° 0'
	29	114° 4'	119° 4'	118° 4'	114° 2'	112° 4'	111° 6'	102° 2'	101° 2'	102° 0'	102° 4'	105° 4'	106° 7'	109° 6'
	30	117° 6'	119° 8'	118° 9'	116° 6'	113° 4'	108° 2'	105° 4'	106° 3'	104° 0'	104° 9'	104° 9'	107° 3'	106° 6'
	Hourly Means	117° 65	118° 67	118° 91	116° 60	112° 83	107° 84	103° 63	101° 64	102° 14	103° 42	105° 63	107° 77	108° 97

<sup>a</sup> Omitted in the Means, in consequence of the influence of disturbance on those days.<sup>b</sup> Seven minutes late.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0°721. Increasing Numbers denote decreasing Westerly Declination.												
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Meana.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
118°0	113°4	109°6	112°4	108°5	110°8	112°3	110°4	111°2	110°5	110°2	113°4	112°12 } 110°30
109°2	115°4	112°2	113°0	112°2	110°8	110°2	110°0	110°4	110°4	111°3	111°4	110°22
112°0	111°5	111°2	109°8	110°2	109°2	109°6	109°6	107°6	111°5	112°9	115°0	109°63
110°6	112°6	110°5	110°4	110°8	110°2	110°4	110°0	112°4	112°4	112°7	116°4	110°01
112°4	111°7	111°4	110°2	110°3	110°2	111°0	113°0	113°6	102°8	112°6	114°8	111°32
111°2	109°0	129°2	112°8	121°5	131°2	125°2	12°7	130°3	118°2	98°4	102°4	110°00
114°8	111°4	110°5	109°3	109°4	109°3	112°0	111°8	105°1	110°2	115°8	114°4	108°75
109°2	108°6	108°1	109°4	110°0	109°6	109°6	116°4	111°9	111°4	112°4	113°8	110°31
107°8	108°9	109°0	109°4	109°2	109°4	109°6	109°4	112°0	113°4	114°4	115°8	109°77
111°0	111°4	114°6	109°4	109°0	109°2	110°2	111°0	110°4	109°6	111°0	115°2	108°70
110°4	111°0	108°2	108°4	109°2	113°5	109°8	110°4	111°0	112°0	113°5	115°4	109°24
107°8	107°4	107°9	108°5	109°3	109°6	110°5	110°0	113°5	115°0	123°0	141°4	111°55
108°4	115°8	100°0	105°4	119°2	111°2	110°4	109°4	109°6	111°0	113°4	114°2	109°95
109°8	112°0	111°0	109°6	113°4	110°4	114°4	110°5	112°4	104°8	112°0	119°3	110°68
110°8	111°4	112°2	111°6	114°2	113°2	115°2	111°4	102°8	109°5	116°2	116°6	112°42
110°3	110°4	106°2	115°8	110°5	118°4	112°6	113°6	106°3	116°3	117°4	115°8	111°03
108°8	109°4	112°8	112°7	108°4	110°5	113°5	113°2	111°4	111°4	109°0	110°0	109°95
113°6	112°3	112°7	111°8	111°8	114°4	114°0	108°6	108°2	108°5	111°6	114°0	110°65
111°0	109°6	108°6	110°2	109°5	109°2	110°4	109°0	111°2	111°0	111°4	113°2	110°44
107°5	107°6	106°7	106°4	106°0	108°4	108°6	112°4	112°5	112°4	115°0	115°6	109°18
109°3	108°2	107°0	106°4	109°2	110°0	115°4	110°8	110°6	116°0	116°6	119°2	110°49
112°2	110°2	110°5	108°8	109°3	109°4	109°6	110°0	110°0	110°2	114°0	117°0	111°55
108°4	104°5	107°9	106°9	107°0	123°0	110°0	112°4	111°4	116°0	113°2	116°2	110°85
111°9	112°2	113°4	115°4	111°2	111°4	111°4	124°0	81°8	110°6	115°4	125°5	110°37
110°4	108°7	108°5	109°2	109°4	109°3	106°8	107°0	107°8	110°4	112°8	114°6	110°22
110°4	110°6	110°0	108°4	109°6	109°6	112°4	112°5	111°5	111°2	115°6	116°0	111°22
111°00	110°58	109°61	109°72	110°23	111°20	111°19	110°95	110°20	111°08	113°67	116°20	110°46
114°0	114°8	108°4	109°0	107°2	107°4	107°5	106°4	107°4	108°2	108°0	104°4	108°39
108°2	108°2	108°3	110°6	110°0	112°8	112°8	113°4	110°4	109°2	115°6	113°6	109°90
108°0	110°6	110°4	113°4	112°4	110°0	108°6	103°2	111°2	111°0	111°4	113°2	110°60
108°4	109°1	109°2	109°4	109°2	109°2	113°0	111°2	110°4	110°4	111°5	112°0	109°85
109°2	109°2	109°0	108°5	109°2	109°3	117°0	111°2	110°0	110°4	111°5	116°4	110°28
110°5	110°0	112°5	116°4	116°6	117°9	117°0	116°4	114°2	121°9	119°4	121°6	113°61
110°8	109°6	109°5	108°6	108°6	115°7	110°6	110°2	104°6	110°0	113°8	121°4	111°30
110°7	107°4	108°4	108°2	109°6	113°4	112°2	109°6	111°7	112°5	113°6	114°0	109°75
107°0	107°4	108°4	108°3	117°7	116°4	111°8	110°0	105°8	107°0	115°4	115°8	109°02
110°8	109°4	133°8	112°3	107°6	108°4	108°1	108°4	110°0	110°9	109°6	117°8	111°02
101°6	115°6	121°4	111°4	119°2	119°0	132°4	111°4	117°4	113°2	113°0	112°2	112°45
105°4	106°2	108°9	105°2	112°2	109°4	109°1	111°4	111°0	111°4	111°8	116°4	109°47
106°4	110°4	110°4	110°0	117°4	113°6	111°2	108°4	109°4	111°0	112°5	113°4	111°51
108°0	108°4	108°0	106°4	110°4	108°8	108°2	108°7	110°7	104°9	111°7	116°1	109°06
109°2	118°4	108°4	108°1	110°0	117°5	112°4	104°8	105°0	110°0	111°4	111°4	110°43
112°8	110°5	113°0	115°5	115°0	116°0	115°2	110°2	109°5	108°4	110°6	114°0	111°52
109°2	111°0	108°8	109°2	109°2	109°4	109°6	109°8	109°5	111°2	110°6	114°5	109°88
104°4	105°8	106°0	106°4	109°3	110°0	109°8	109°9	109°9	111°2	111°2	107°4	109°17
111°0	114°0	109°2	108°6	110°5	108°8	108°4	110°0	109°2	109°7	110°6	113°3	110°53
109°4	109°3	109°4	109°0	108°0	108°6	108°8	109°4	110°0	110°0	110°4	112°3	109°57
110°4	110°0	110°2	110°3	109°4	108°5	108°8	109°5	110°4	112°0	114°5	114°0	110°12
107°6	108°2	108°6	108°2	108°0	109°6	111°4	109°6	110°1	111°0	112°4	114°9	109°32
112°6	110°0	105°8	106°4	107°4	109°4	108°9	109°3	109°9	110°8	113°3	113°0	109°57
114°0	114°8	110°2	111°4	109°6	110°4	110°4	110°0	107°9	112°4	112°9	112°2	111°17
109°6	110°2	109°6	108°5	111°2	111°0	114°0	110°0	112°4	97°6	116°4	116°4	110°26
106°6	107°2	108°9	118°4	121°4	116°2	116°4	116°0	112°4	111°0	112°0	116°4	112°09
108°97	110°22	110°57	110°14	111°40	111°76	112°11	110°28	110°02	110°28	112°50	114°16	110°38

\* Nine minutes late.

\* Five minutes late.

\* Four minutes late.

\* Eight minutes late.

DECLINATION.												
Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
JULY.	1	121'2	123'5	122'0	120'9	111'0	111'0	108'4	105'6	106'7	104'9	106'4
	2	117'4	119'3	121'0	117'4	113'9	109'4	104'2	102'2	104'4	105'6	107'0
	3	117'8	119'6	120'4	121'2	110'6	106'8	104'4	103'8	104'6	101'4	105'4
	4	—	—	—	—	—	—	—	—	—	—	—
	5	119'0	121'4	118'4	114'2	112'4	105'6	103'2	103'4	103'6	107'6	108'8
	6	122'2	123'4	118'8	115'5	112'2	109'7	106'1	103'9	106'8	106'0	107'4
	7	119'8	120'4	121'5	117'4	114'3	97'3	94'4	101'6	101'7	101'5	104'0
	8	116'4	116'0	114'0	109'0	109'4	106'0	104'3	104'4	105'4	105'4	106'4
	9	119'2	119'6	116'2	114'6	111'4	107'5	102'4	105'4	99'4	101'4	96'2
	10	121'8	123'6	123'9	123'2	119'3	111'5	108'9	102'2	109'9	104'4	106'5
	11	—	—	—	—	—	—	—	—	—	—	—
	12	122'8	123'4	122'0	118'2	114'6	111'5	105'4	98'6	101'0	102'2	103'4
	13	119'4	122'5	125'3	121'0	113'2	106'2	101'2	99'4	99'2	99'4	103'4
	14	117'4	123'4	123'4	120'6	110'4	103'4	100'4	100'7	101'5	101'2	105'4
	15	120'0	122'4	123'0	120'8	115'4	108'4	104'4	100'5	99'4	101'2	103'8
	16	119'2	120'0	120'5	117'6	112'4	107'2	101'6	100'0	101'3	101'4	101'4
	17	114'5	113'4	113'4	116'8	112'2	108'9	101'9	100'4	96'4	103'0	105'9
	18	—	—	—	—	—	—	—	—	—	—	—
	19	118'4	120'5	120'8	118'4	113'4	110'4	105'2	105'4	104'4	105'2	107'4
	20	117'4	116'0	118'4	116'4	114'3	108'4	103'4	101'4	101'2	103'9	107'6
	21	118'3	121'2	120'4	115'8	110'2	106'4	102'4	91'2	98'2	103'0	106'8
	22	121'2	124'4	122'5	117'8	113'7	107'8	101'2	97'2	101'2	101'2	107'4
	23	121'4	121'6	118'4	117'3	113'4	106'6	106'3	101'0	103'1	105'0	109'1
	24	118'2	121'4	121'2	119'1	113'6	107'2	103'2	102'9	106'2	110'0	110'4
	25	—	—	—	—	—	—	—	—	—	—	—
	26	118'0	119'4	120'4	113'4	104'0	104'5	95'5	98'4	98'5	103'0	109'4
	27	120'9	120'9	120'1	117'4	109'9	105'9	101'4	104'6	106'6	108'4	110'8
	28	118'5	122'2	119'2	115'2	105'9	103'4	100'6	101'4	105'2	106'5	110'2
	29	119'4	118'6	118'4	116'4	112'7	109'4	104'2	102'5	103'4	106'0	107'4
	30	120'0	123'3	123'4	120'4	111'6	105'0	102'9	101'9	99'6	105'4	106'4
	31	118'8	121'0	123'6	123'0	117'2	108'6	104'6	102'6	101'4	101'3	107'4
August 1	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	119'32	120'83	120'39	117'74	112'32	107'18	103'15	101'69	102'60	104'24	106'36	
AUGUST.	2	118'2	121'8	121'2	123'0	119'5	113'4	105'2	100'4	98'8	98'4	
	3	121'0	121'6	119'4	118'6	115'9	111'4	107'8	103'8	101'3	101'5	
	4	115'1	129'8	125'4	114'8	111'6	110'2	104'7	103'3	104'7	106'0	
	5	121'3	121'4	121'1	124'2	111'9	110'9	101'5	100'6	103'9	105'6	
	6	123'4	127'4	125'0	124'6	112'6	107'6	104'9	95'0	100'4	104'6	
	7	116'6	121'5	122'2	117'4	112'0	105'4	101'5	99'2	102'8	105'2	
	8	—	—	—	—	—	—	—	—	—	—	
	9	117'3	120'2	120'6	118'4	111'2	105'4	101'7	98'3	98'0	100'3	
	10	119'4	120'0	122'1	121'6	111'0	108'8	104'1	95'4	96'6	96'6	
	11	117'4	121'3	121'6	120'4	110'4	105'4	98'9	96'6	97'9	102'8	
	12	117'1	122'0	123'3	119'2	113'5	106'6	98'6	91'6	96'4	98'8	
	13	118'2	120'6	120'8	120'1	111'4	105'2	97'9	96'4	98'4	101'4	
	14	125'4	121'2	122'8	118'0	101'8	107'8	83'1	96'4	96'6	99'3	
	15	—	—	—	—	—	—	—	—	—	—	
	16	116'2	120'4	125'5	123'6	115'6	106'3	100'3	93'8	91'8	109'6	
	17	121'7	130'3	127'2	120'5	117'9	110'0	110'2	98'0	97'6	98'5	
	18	121'9	126'3	126'9	121'8	115'1	109'7	101'9	96'0	96'8	98'8	
	19	119'9	122'9	124'6	116'6	109'0	103'6	99'4	99'0	102'2	106'0	
	20	117'8	121'4	121'1	114'0	110'2	107'5	105'1	104'0	107'6	107'4	
	21	118'6	121'8	122'6	118'0	108'4	102'9	100'4	98'5	97'0	98'5	
	22	—	—	—	—	—	—	—	—	—	—	
	23	121'4	123'8	122'3	116'0	109'5	103'9	99'0	98'8	102'5	104'2	
	24	122'0	120'5	124'3	119'8	111'9	103'2	98'9	100'7	101'6	105'4	
	25	112'5	116'6	111'2	120'0	106'2	101'6	100'4	100'7	101'6	102'8	
	26	124'0	121'0	118'0	116'2	111'8	105'2	100'1	98'4	99'8	102'3	
	27	119'5	121'8	120'7	118'0	114'5	106'7	99'4	96'1	97'8	102'2	
	28	118'5	125'0	124'6	118'8	111'4	101'6	95'4	97'4	98'2	101'4	
	29	—	—	—	—	—	—	—	—	—	—	
	30 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	
	31 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	
	Hourly Means	119'50	122'87	122'42	119'33	112'36	106'80	100'82	98'39	99'72	102'73	

<sup>a</sup> The Observations omitted, the Magnet having been affected considerably by the vertical iron shafts of Robinson's Anemometer.





DECLINATION.													12h.
Angular Value of one Scale Division of the Declinometer = 0''721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen } Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
SEPTEMBER.	1 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	2 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	3	119°3	121°3	122°4	119°2	112°4	111°1	106°4	101°7	105°4	102°6	101°4	107°4
	4	114°2	115°3	122°5	114°9	111°9	110°4	104°2	101°9	101°9	104°9	106°2	106°2
	5	—	—	—	—	—	103°6	102°9	104°2	106°6	108°4	113°6	112°8
	6	117°9	119°2	120°4	118°4	114°4	105°2	101°2	96°8	99°6	104°4	107°4	110°0
	7	117°6	121°4	121°4	120°4	113°9	106°4	100°4	100°0	102°0	105°3	108°5	110°4
	8	118°4	121°4	121°2	118°5	111°9	113°6	98°2	96°9	98°3	101°1	105°4	107°6
	9	117°6	117°0	106°4	108°4	102°4	108°6	92°6	91°5	93°0	96°2	101°6	111°4
	10	117°4	122°0	121°5	117°2	110°2	104°6	98°8	100°4	101°8	105°9	110°2	110°4
	11	121°0	121°4	120°6	117°8	112°4	103°4	101°5	98°4	99°6	103°4	107°4	110°4
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	121°2	114°8	98°4	98°2	100°6	91°6	96°0	91°5	100°4	106°5	112°4	111°2
	14	118°8	120°0	119°4	119°2	108°6	106°6	103°2	97°5	98°0	102°0	106°8	108°9
	15	118°4	122°7	122°7	120°1	114°4	108°3	101°4	96°4	96°5	101°0	105°3	109°4
	16	120°0	124°9	127°2	124°4	120°4	113°2	101°6	99°2	102°4	105°6	107°8	107°4
	17	115°6	123°4	120°0	118°4	116°4	104°4	98°2	93°4	99°2	103°4	108°8	116°6
	18	118°8	123°2	122°0	122°8	111°4	107°4	104°8	102°4	99°5	103°4	106°4	115°4
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	118°8	120°4	120°2	116°8	113°2	108°2	103°4	101°5	103°4	106°2	108°4	107°5
	21	116°5	118°4	119°4	111°2	112°0	105°4	100°5	97°9	101°4	105°4	108°9	110°4
	22	115°2	116°8	115°0	112°4	105°3	106°6	105°0	101°5	102°4	108°4	112°4	113°4
	23	110°4	114°4	101°8	96°9	97°6	96°9	94°4	98°9	103°6	109°3	112°5	114°0
	24 <sup>b</sup>	117°9	182°0	80°5	83°0	110°1	153°4	78°8	121°8	86°3	97°1	104°8	121°0
	25	113°4	116°4	117°4	114°4	110°8	103°3	98°2	95°4	95°9	99°4	104°5	107°5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27 <sup>d</sup>	25°8	74°0	83°8	97°6	109°9	103°0	94°0	99°2	105°3	108°8	110°0	107°4
	28	115°0	118°2	119°4	118°4	112°5	106°9	102°2	100°4	100°4	102°3	103°2	109°4
	29	113°4	117°4	120°3	123°5	116°6	112°9	109°3	118°0	100°4	94°4	101°6	116°1
	30	112°4	114°5	117°4	118°8	122°4	116°4	111°4	105°2	101°0	102°6	103°7	107°2
Hourly Means	116°85	109°30	118°18	116°06	111°41	106°54	101°34	99°62	100°19	103°47	107°31	110°36	
OCTOBER.	1	113°2	117°4	116°5	118°7	118°7	113°5	111°6	108°2	106°4	106°1	105°2	110°2
	2	112°5	114°4	117°4	115°1	107°0	110°6	108°9	106°4	105°3	105°6	106°0	106°3
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	113°8	116°4	115°9	114°8	112°6	110°3	107°4	106°5	107°5	108°4	107°9	106°4
	5	114°4	117°9	118°4	118°8	112°4	108°0	103°4	100°4	102°4	102°8	101°2	102°4
	6	114°0	116°7	117°0	118°6	114°4	107°4	103°2	101°4	101°2	106°8	108°8	108°8
	7	114°4	117°4	118°8	117°0	113°1	107°4	102°0	102°4	102°8	105°9	107°9	107°9
	8	120°6	118°4	121°4	119°5	116°4	107°5	100°9	99°6	97°9	98°0	98°3	99°3
	9	116°2	120°4	121°9	117°4	124°2	115°4	109°2	105°5	103°9	105°4	105°7	106°7
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	115°0	118°4	119°8	118°4	114°5	108°4	102°2	100°7	100°4	105°2	106°4	107°6
	12	117°4	118°6	122°4	121°4	114°6	108°4	102°8	103°4	103°4	103°3	106°7	106°4
	13	112°5	119°4	64°4	101°0	104°4	87°9	100°6	101°6	99°4	103°8	101°4	105°4
	14	115°2	118°2	118°2	111°9	112°4	108°9	100°4	100°5	102°6	106°9	106°3	108°8
	15	111°5	112°9	108°8	114°1	114°2	106°6	101°9	103°9	106°4	107°7	110°4	112°4
	16	112°4	112°0	118°2	114°4	110°0	104°6	104°3	103°4	104°8	107°4	108°2	108°3
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	122°5	117°6	111°4	107°0	101°6	105°8	108°4	101°5	105°4	107°9	110°5	118°0
	19	113°8	109°8	111°6	115°5	106°6	111°2	103°4	102°6	105°8	106°5	109°3	108°5
	20	113°6	116°3	119°4	119°4	115°4	110°4	106°4	107°1	107°6	108°2	109°4	113°5
	21	114°6	116°4	118°0	119°4	117°6	113°4	108°2	106°2	107°4	107°9	109°4	103°4
	22 <sup>d</sup>	110°4	112°6	114°3	113°5	115°6	109°3	106°4	106°6	108°2	103°8	98°4	108°1
	23	137°5	57°2	142°6	118°3	128°3	125°3	119°4	105°9	103°6	109°7	107°4	120°4
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25 <sup>d</sup>	110°1	110°3	95°2	107°3	114°9	98°4	101°4	119°4	111°0	108°0	109°4	108°4
	26	113°5	117°2	118°6	119°2	115°4	106°0	103°4	104°2	105°4	108°4	110°0	108°4
	27	113°8	116°8	121°4	121°6	119°5	114°3	109°6	106°4	106°4	105°4	106°4	106°8
	28	113°6	116°4	120°4	119°7	116°5	110°8	105°4	101°8	103°6	101°6	107°2	109°2
	29	102°2	120°4	122°9	124°8	122°2	125°6	106°4	106°4	102°2	102°4	105°1	108°2
	30	112°4	117°4	119°3	120°3	116°3	111°7	106°9	104°4	105°0	106°6	108°2	108°4
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	114°12	116°70	118°08	117°59	114°36	110°28	105°29	103°90	101°25	105°79	107°30	108°27	

<sup>a</sup> Observations omitted, having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's Anemometer.

DECLINATION.  
Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.

		12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Means.
Dir.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
4	107.4	108.9	109.0	106.9	106.5	109.4	109.4	110.7	111.6	112.4	116.4	116.8	116.4	112.71
2	106.2	115.4	118.5	123.4	115.8	115.4	110.4	111.0	112.2	112.4	112.6	113.8	113.8	
6	112.8	110.2	110.4	128.5	117.3	109.7	104.9	—	—	—	—	—	—	111.89
4	110.0	111.4	110.8	112.0	120.4	118.8	114.3	118.0	112.4	111.4	112.4	112.0	113.6	
5	110.4	112.0	110.2	111.8	111.8	110.6	112.3	111.9	111.5	112.4	109.3	113.2	115.2	111.77
4	107.6	108.4	108.9	110.6	110.4	110.6	110.4	110.4	110.8	111.4	111.8	112.0	114.4	111.25
6	111.4	107.6	109.2	110.9	108.8	114.4	108.6	106.6	111.3	111.2	113.3	113.5	113.7	110.11
2	110.4	112.0	110.5	109.2	117.1	111.2	109.9	110.4	110.0	111.2	109.1	110.4	111.5	107.32
4	110.4	111.5	110.6	116.5	117.2	112.6	113.0	—	—	—	—	—	—	110.54
1	111.2	112.0	110.4	120.4	111.0 <sup>b</sup>	111.0	120.0	110.2	115.9	119.0	123.4	108.2	127.8	112.63
8	108.9	107.5	109.2	108.9	109.6	111.4	110.7	111.5	112.4	112.6	114.4	115.2	116.4	109.23
3	109.4	110.2	110.4	109.5	112.6	115.8	110.4	111.2	111.0	111.5	113.4	114.3	115.0	110.06
6	107.8	107.4	107.4	107.4	110.5	127.6	111.6	116.9	113.8	109.0	111.8	111.9	117.9	110.91
8	110.6	110.0	110.3	111.0	111.2	111.2	111.2	114.2	120.4	117.4	120.4	113.0	115.2	112.43
4	115.4	113.4	109.4	109.4	109.8	110.6	110.4	—	—	—	—	—	—	111.55
1	107.5	108.0	107.6	108.9	109.5	112.4	120.4	107.5	120.6	118.4	116.5	116.6	115.4	111.87
9	110.4	110.6	109.4	109.0	108.4	108.4	106.2	105.0	109.4	112.4	112.0	112.6	112.2	112.07
2	113.4	112.8	112.4	111.4	110.6	109.4	110.1	114.6	120.0	112.0	117.0	111.0	116.4	109.42
5	114.0	111.6	113.3	110.4	108.4	108.9	109.0	122.0	115.4	120.3	124.6	110.0	101.0	111.46
8	121.0	119.0	110.0	118.0	115.6	110.9	105.6	100.4	107.4	101.4	109.5	112.4	112.0	110.07
5	107.5	110.4	108.3	107.9	109.4	109.0	107.5	—	—	—	—	—	—	95.87
0	107.4	109.7	110.4	109.0	107.8	107.4	109.5	111.4	111.2	110.8	110.6	111.8	112.0	108.37
2	109.4	134.0	124.4	105.4	112.9	111.3	109.4	103.3	109.2	110.0	106.5	107.0	109.8	99.53
6	116.1	121.5	107.5	131.9	114.2	120.0	118.9	114.0	120.4	105.4	110.6	109.9	110.0	110.48
7	107.2	108.4	108.2	108.5	108.6	110.0	110.4	110.4	110.5	110.3	113.4	112.3	115.4	113.67
31	110.36	112.10	110.65	112.86	112.07	112.74	111.36	112.11	114.57	112.48	113.68	113.47	113.75	110.91
2	110.2	107.0	107.7	109.3	109.9	110.5	113.0	110.9	112.2	111.8	114.6	112.8	112.2	111.57
0	106.3	107.4	109.2	109.4	109.8	110.4	110.2	—	—	—	—	—	—	110.31
9	106.4	108.2	109.4	109.6	110.0	110.2	111.2	111.2	112.0	112.0	114.9	113.8	113.4	110.99
2	102.4	101.2	107.0	108.4	108.3	109.4	109.7	109.6	110.3	111.1	111.4	112.0	112.4	108.88
8	108.8	109.2	109.5	110.0	109.2	109.6	109.7	110.4	110.5	110.4	110.4	113.7	112.4	110.26
9	107.9	108.6	108.9	109.1	109.4	109.6	110.4	112.4	113.1	119.5	125.2	125.2	117.5	111.95
3	99.3	93.2	103.0	109.6	109.2	110.4	109.8	95.5	114.8	117.2	113.8	113.6	113.6	108.40
7	106.7	105.4	106.7	106.7	115.5	111.7	110.4	—	—	—	—	—	—	112.05
4	107.6	109.2	108.4	11.5	110.4	110.0	110.0	111.0	115.2	113.0	113.8	111.0	113.9	110.75
7	106.4	107.5	108.8	109.0	107.9	113.1	110.6	111.4	116.2	110.2	116.4	129.0	119.4	117.3
4	105.4	104.9	110.6	109.9	110.4	110.2	110.6	110.1	110.1	111.8	111.4	112.5	113.4	112.15
3	108.8	108.9	109.6	109.0	113.4	110.2	110.6	114.6	116.5	115.7	117.4	112.2	112.4	105.60
4	112.4	122.6	112.2	110.8	110.5	111.6	113.7	111.0	115.4	112.8	120.4	111.6	112.0	111.12
2	108.3	108.6	112.4	114.4	115.0	114.8	111.8	—	—	—	—	—	—	111.58
5	118.0	116.4	109.0	110.2	111.4	111.4	110.9	111.4	123.8	121.2	117.1	126.0	118.7	113.10
3	108.5	107.4	109.6	110.1	113.7	120.9	111.4	114.4	112.5	112.4	112.2	113.3	113.5	111.12
4	113.5	112.0	107.4	110.4	108.4	108.4	100.7	112.5	107.3	111.9	111.8	111.6	112.3	110.65
4	109.4	110.4	110.4	110.4	109.7	110.6	111.5	111.6	112.6	112.8	112.8	112.8	112.6	111.50
1	108.1	109.2	109.6	113.7	113.8	114.0	113.7	115.4	113.4	135.5	87.0	133.7	142.3	111.82
4	120.0	120.4	112.4	115.9	106.4	105.9	79.0	—	—	—	—	—	—	112.6
4	108.4	109.4	110.4	119.4	111.4	107.4	107.6	109.5	109.5	109.4	112.2	113.5	112.6	111.43
0	108.4	110.6	112.4	109.8	110.2	110.4	113.5	111.2	110.8	110.0	111.6	112.4	112.8	109.25
4	106.8	108.2	107.4	109.6	110.4	110.5	108.8	110.9	111.2	113.2	110.2	110.8	118.2	111.96
2	109.2	107.7	108.6	108.8	109.4	109.4	107.5	108.0	109.3	109.3	110.6	111.0	115.8	111.58
1	108.2	108.8	108.8	111.0	111.6	110.5	110.3	109.7	110.2	110.4	110.2	111.2	112.6	110.17
2	108.4	109.0	110.3	110.3	111.4	115.6	113.2	—	—	—	—	—	—	111.42
30	108.27	108.52	108.94	110.00	110.70	111.30	110.89	111.32	113.10	112.61	114.03	114.81	114.72	111.12

<sup>a</sup> Fifteen minutes late.

<sup>b</sup> Three minutes late.

Omitted in the Means, on account of disturbance.

Declinometer.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0" 721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen } Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
NOVEMBER.	1	115°6	118°9	115°8	90°4	97°4	109°3	106°4	104°9	106°6	106°7	102°8	93°6
	2	118°2	118°2	117°4	116°9	113°2	111°5	108°3	107°0	106°4	107°2	107°6	108°4
	3	109°3	109°0	108°4	113°6	114°4	108°2	106°2	104°4	103°8	104°6	106°4	108°2
	4	111°5	116°3	117°5	116°4	112°8	109°2	104°8	103°5	104°6	105°4	107°0	108°8
	5	117°8	108°8	112°4	116°4	114°1	110°4	105°5	104°4	106°4	108°4	108°4	108°4
	6	117°5	117°4	118°4	119°3	114°0	108°5	105°0	104°1	103°0	104°6	106°5	108°2
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	118°0	109°0	110°4	111°6	103°4	108°6	104°2	101°5	102°2	103°4	104°4	108°2
	9	115°2	114°2	113°6	113°0	114°9 <sup>b</sup>	110°4	106°5	103°8	103°4	103°8	104°4	107°6
	10	111°6	112°2	122°4	118°5	111°2	105°6	99°4	98°9	100°1	103°3	103°4	104°2
	11	113°7	115°4	119°6	121°1	118°6	113°3	108°0	105°6	105°0	106°4	107°5	108°7
	12	111°7	117°4	121°4	122°8	121°8	115°4	110°0	107°2	104°2	106°8	108°4	110°2
	13	114°4	112°2	121°8	121°9	116°1	111°9	105°2	104°4	101°8	105°0	106°2	107°8
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	112°5	114°2	116°6	116°4	115°4	110°4	107°5	105°4	104°4	105°4	107°7	110°3
	16	108°6	116°2	116°4	120°0	110°8	111°4	106°2	97°8	100°0	101°3	102°4	100°9
	17	112°8	115°2	116°4	113°3	112°2	109°6	107°4	103°0	106°6	107°4	107°4	109°2
	18	114°3	115°5	115°2	111°4	113°8	109°4	106°5	106°6	107°4	108°4	107°2	107°4
	19	114°8	115°4	117°6	113°2	114°8	109°0	105°8	105°2	106°4	104°4	120°4	98°4
	20 <sup>c</sup>	117°4	84°8	105°0	122°8	118°0	111°4	104°4	103°6	103°4	105°4	106°4	107°4
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22 <sup>c</sup>	114°2	115°4	118°2	116°4	116°6	115°4	117°4	101°2	91°0	118°4	94°0	98°2
	23	111°6	113°4	116°4	116°0	111°6	110°5	104°1	101°8	107°0	107°4	107°4	107°6
	24	111°6	111°6	112°4	112°8	110°8	107°4	102°5	102°4	101°0	104°4	107°4	110°4
	25 <sup>c</sup>	116°2	110°4	122°4	117°3	116°4	118°5	105°9	106°4	100°6	96°2	100°4	100°8
	26	107°5	108°6	102°5	110°6	113°4	111°6	110°9	109°4	106°8	105°8	106°9	103°8
	27	116°2	113°4	114°8	108°5	113°0	113°1	109°6	105°2	107°4	107°4	105°4	112°5
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	113°4	114°2	115°4	116°1	116°5	113°0	108°8	114°3	105°0	106°4	108°4	109°9
	30	113°5	114°3	115°5	115°4	115°4	114°0	110°5	107°4	107°0	107°4	107°8	109°9
Hourly Means	113°40	113°96	115°58	114°59	113°03	110°73	106°49	101°83	104°89	105°84	107°02	107°07	
DECEMBER.	1	115°0	115°5	115°4	115°6	116°6	115°6	112°5	116°2	116°9	108°6	110°4	109°8
	2	114°6	113°0	114°4	113°6	114°2	111°3	111°9	107°4	107°0	105°2	105°2	111°4
	3	108°4	108°2	114°9	117°4	107°0	106°6	107°6	105°4	105°8	106°3	106°7	107°8
	4	114°8	112°5	109°7	102°5	109°8	107°4	107°3	105°4	106°4	107°0	107°4	109°0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	113°3	113°3	114°2	115°4	114°4	112°5	110°3	110°4	110°6	109°4	109°0	110°0
	7	113°7	114°0	114°4	113°9	114°3	110°3	107°5	106°4	106°2	105°9	105°9	107°4
	8	110°4	112°0	107°2	116°6	103°5	106°0	102°4	105°8	106°0	107°8	109°2	110°4
	9	107°4	117°4	112°4	105°4	107°4	104°8	103°4	105°5	100°7	108°3	107°6	109°4
	10	116°4	112°6	114°6	111°4	108°6	106°5	102°2	102°4	101°4	102°4	116°4	110°1
	11	98°3	98°9	100°9	109°6	113°1	113°4	109°3	108°4	108°0	107°9	105°4	109°3
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	112°5	113°5	114°6	113°6	112°6	110°8	109°0	105°0	105°2	105°6	109°2	109°8
	14	106°6	110°2	103°4	117°4	119°4	116°5 <sup>d</sup>	110°4	106°2	106°0	106°2	108°8	109°8
	15	112°5	114°3	115°4	118°2	116°4	116°6	110°2	107°6	106°6	107°4	108°0	110°0
	16	112°8	113°4	113°8	117°2	118°7	117°0	112°6	109°4	108°9	107°4	106°5	110°2
	17	115°4	114°4	118°3	130°4	139°4	104°6	119°6	106°0	89°5	97°8	109°1	102°5
	18 <sup>c</sup>	104°5	112°4	98°4	116°9	104°5	108°4	109°6	108°2	101°6	111°4	108°4	111°0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20 <sup>c</sup>	7°8	10°0	117°8	45°7	84°0	116°4	115°5	100°3	107°3	121°5	109°4	103°9
	21	112°4	116°4	116°7	118°8	119°4	113°4	110°6	107°0	106°6	106°5	106°4	107°7
	22	110°4	111°6	112°8	102°9	108°6	110°7	107°6	106°4	107°4	107°9	106°9	106°6
	23	110°9	111°0	111°0	115°6	111°5	111°6	109°4	107°5	107°2	104°6	106°5	108°4
	24	108°4	113°4	116°5	116°5	116°2	111°5	109°2	106°5	104°4	107°0	109°4	110°6
	25 <sup>c</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	113°4	115°4	118°6	118°2	117°2	111°6	108°4	106°4	107°5	109°2	109°6	110°5
	28	112°4	113°5	114°8	116°2	117°6	113°4	110°4	106°4	108°0	108°0	107°5	108°8
	29	111°8	115°4	115°5	119°5	118°5	109°9	107°3	109°3	99°9	105°8	105°9	107°6
	30	112°5	113°0	113°8	116°2	116°9	114°5	111°4	110°4	107°3	106°9	106°3	107°2
	31	113°3	113°3	114°6	117°2	117°6	114°5	113°0	111°2	110°4	110°2	108°2	108°8
Hourly Means	111°57	112°76	113°25	114°97	114°95	111°29	109°31	107°41	106°00	106°68	107°99	108°88	

<sup>a</sup> Thirteen minutes late.

<sup>b</sup> Two minutes late.

<sup>c</sup> Omitted in the Means, on account of disturbance.

DECLINATION.  
Angular Value of one Scale Division of the Declinometer = 0° 72'. Increasing Numbers denote decreasing Westerly Declination.

0h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
93° 6'	108° 4'	107° 6'	103° 4'	117° 1'	115° 4'	108° 4'	120° 6'	114° 4'	118° 2'	118° 0'	115° 8'	114° 6'	112° 8'	109° 78'
97° 6'	108° 4'	109° 6'	109° 4'	109° 8'	109° 5'	108° 4'	115° 1'	108° 5'	102° 4'	116° 6'	112° 4'	117° 8'	109° 6'	111° 23'
96° 4'	108° 2'	108° 3'	108° 5'	110° 8'	111° 5'	111° 4'	111° 5'	112° 0'	98° 4'	114° 8'	117° 2'	112° 4'	112° 4'	109° 65'
97° 0'	108° 8'	110° 0'	110° 4'	110° 2'	109° 9'	110° 4'	119° 5'	114° 0'	111° 4'	120° 6'	111° 3'	113° 4'	114° 0'	110° 95'
98° 4'	108° 4'	110° 4'	111° 2'	111° 3'	110° 7'	111° 5'	111° 3'	116° 9'	112° 4'	118° 2'	120° 8'	118° 4'	121° 4'	112° 33'
96° 5'	108° 2'	109° 2'	110° 4'	110° 6'	110° 2'	111° 2'	114° 4'	—	—	—	—	—	—	111° 55'
94° 4'	108° 2'	109° 3'	109° 6'	109° 2'	112° 4'	111° 4'	111° 5'	115° 2'	114° 3'	111° 4'	110° 3'	115° 6'	117° 8'	109° 66'
94° 4'	107° 6'	107° 6'	110° 2'	112° 4'	122° 8'	117° 6'	113° 4'	113° 8'	111° 4'	112° 6'	113° 4'	115° 4'	112° 6'	111° 42'
93° 4'	104° 2'	112° 4'	113° 0'	112° 8'	119° 4'	115° 9'	120° 6'	107° 4'	109° 7'	111° 0'	114° 3'	112° 4'	111° 8'	110° 48'
97° 5'	108° 7'	109° 4'	109° 8'	114° 6'	113° 4'	113° 4'	118° 8'	112° 4'	109° 2'	109° 4'	109° 4'	111° 2'	110° 0'	111° 83'
98° 4'	110° 2'	109° 6'	111° 0'	116° 4'	111° 6'	117° 4'	113° 4'	112° 2'	110° 6'	112° 3'	114° 4'	107° 8'	108° 7'	112° 61'
96° 2'	107° 8'	110° 6'	111° 2'	112° 8'	113° 3'	112° 5'	112° 4'	—	—	—	—	—	—	112° 03'
97° 7'	110° 3'	109° 6'	110° 5'	109° 6'	119° 5'	115° 4'	110° 4'	111° 9'	112° 0'	114° 7'	114° 9'	115° 0'	115° 4'	112° 03'
92° 4'	100° 9'	105° 4'	106° 0'	111° 6'	111° 4'	115° 4'	117° 2'	111° 0'	118° 0'	111° 0'	112° 6'	112° 6'	104° 4'	111° 30'
97° 4'	109° 2'	110° 4'	110° 3'	111° 3'	113° 4'	112° 4'	113° 4'	111° 5'	111° 0'	111° 6'	112° 0'	114° 6'	113° 4'	110° 06'
97° 4'	107° 4'	113° 0'	110° 4'	111° 4'	110° 0'	110° 4'	110° 4'	110° 4'	110° 2'	111° 6'	111° 6'	106° 4'	109° 6'	110° 35'
98° 4'	107° 4'	102° 2'	110° 8'	112° 4'	111° 7'	116° 8'	117° 2'	114° 0'	110° 2'	110° 3'	109° 4'	109° 9'	113° 4'	110° 99'
96° 4'	107° 4'	108° 4'	106° 4'	112° 6'	111° 8'	112° 0'	111° 8'	—	—	—	—	—	—	108° 75'
94° 0'	98° 2'	104° 4'	124° 0'	109° 0'	123° 2'	123° 0'	115° 0'	107° 4'	106° 4'	106° 4'	110° 9'	111° 6'	114° 4'	111° 11'
97° 4'	107° 6'	109° 2'	110° 2'	110° 4'	109° 2'	108° 4'	108° 4'	119° 4'	103° 0'	102° 6'	104° 0'	109° 8'	109° 8'	111° 11'
97° 4'	110° 4'	114° 2'	112° 4'	113° 4'	113° 4'	141° 2'	118° 4'	109° 2'	100° 2'	107° 7'	112° 4'	110° 7'	110° 8'	109° 56'
100° 4'	100° 8'	112° 6'	113° 3'	99° 4'	182° 6'	119° 3'	125° 0'	121° 3'	122° 6'	121° 4'	118° 0'	113° 2'	110° 2'	115° 18'
106° 9'	103° 8'	116° 0'	116° 6'	111° 6'	106° 0'	115° 2'	111° 6'	111° 4'	110° 4'	109° 2'	104° 3'	101° 4'	111° 4'	109° 41'
95° 4'	112° 5'	114° 4'	112° 0'	112° 2'	111° 6'	112° 6'	113° 4'	—	—	—	—	—	—	111° 50'
98° 4'	109° 9'	110° 4'	110° 6'	111° 6'	112° 9'	111° 6'	112° 6'	114° 2'	112° 6'	111° 4'	113° 3'	112° 5'	112° 4'	111° 44'
107° 8'	109° 9'	110° 7'	113° 2'	111° 8'	112° 8'	112° 8'	111° 6'	111° 8'	112° 3'	112° 6'	112° 8'	113° 4'	114° 3'	112° 08'
107° 02'	107° 07'	109° 98'	110° 37'	112° 03'	112° 78'	114° 25'	114° 22'	111° 61'	110° 44'	112° 17'	112° 67'	112° 50'	112° 67'	110° 95'
104° 4'	109° 8'	109° 2'	110° 6'	112° 8'	111° 4'	111° 7'	115° 2'	111° 6'	112° 2'	111° 2'	111° 0'	121° 4'	116° 4'	113° 45'
95° 2'	111° 4'	102° 4'	104° 5'	111° 4'	115° 8'	114° 0'	121° 2'	118° 4'	118° 3'	103° 0'	115° 2'	112° 4'	114° 2'	111° 67'
106° 7'	107° 8'	108° 0'	113° 8'	112° 0'	110° 6'	111° 9'	111° 3'	113° 0'	112° 4'	113° 2'	113° 2'	112° 8'	113° 0'	110° 43'
107° 4'	109° 0'	111° 2'	112° 2'	115° 4'	114° 4'	115° 9'	113° 4'	—	—	—	—	—	—	110° 97'
100° 0'	110° 0'	110° 6'	110° 6'	111° 4'	111° 6'	112° 8'	113° 0'	109° 4'	115° 4'	116° 2'	113° 8'	113° 4'	113° 5'	110° 97'
93° 9'	107° 4'	109° 4'	108° 5'	106° 2'	107° 4'	109° 6'	111° 4'	113° 0'	112° 0'	112° 0'	112° 5'	113° 0'	112° 8'	112° 02'
99° 2'	110° 4'	111° 9'	109° 4'	108° 5'	111° 9'	115° 1'	112° 2'	113° 0'	114° 5'	113° 9'	114° 6'	111° 0'	112° 6'	110° 91'
97° 6'	109° 4'	110° 0'	111° 4'	111° 6'	112° 0'	111° 4'	111° 3'	111° 4'	112° 4'	96° 6'	113° 5'	114° 8'	116° 4'	109° 27'
16° 4'	110° 1'	109° 4'	114° 2'	108° 4'	112° 4'	122° 2'	121° 6'	128° 0'	119° 4'	111° 8'	112° 4'	107° 5'	101° 6'	111° 54'
95° 4'	109° 3'	112° 4'	113° 4'	112° 5'	113° 8'	113° 2'	112° 4'	—	—	—	—	—	—	109° 45'
99° 2'	109° 8'	109° 6'	109° 8'	111° 0'	115° 8'	111° 7'	111° 4'	110° 4'	109° 3'	111° 6'	111° 4'	112° 0'	111° 8'	110° 60'
98° 8'	109° 8'	110° 6'	111° 6'	112° 4'	116° 0'	114° 8'	112° 9'	111° 6'	112° 0'	109° 4'	108° 4'	109° 0'	108° 4'	111° 29'
98° 0'	110° 0'	111° 3'	112° 0'	112° 4'	113° 4'	112° 6'	112° 6'	111° 6'	107° 6'	111° 4'	111° 7'	112° 6'	112° 6'	111° 58'
96° 5'	110° 2'	110° 4'	110° 4'	110° 8'	110° 3'	114° 4'	114° 4'	118° 4'	115° 8'	115° 6'	119° 0'	124° 2'	117° 5'	113° 74'
99° 1'	102° 5'	109° 2'	109° 6'	112° 4'	106° 4'	111° 8'	111° 4'	112° 4'	113° 8'	111° 4'	111° 4'	112° 9'	113° 4'	111° 39'
98° 4'	111° 0'	111° 4'	111° 2'	123° 2'	114° 2'	117° 0'	121° 9'	—	—	—	—	—	—	100° 51'
99° 4'	103° 9'	120° 2'	133° 5'	115° 4'	118° 7'	120° 0'	112° 4'	106° 0'	143° 0'	125° 0'	120° 0'	81° 8'	155° 8'	102° 30'
95° 4'	107° 7'	109° 8'	111° 4'	111° 2'	111° 6'	111° 6'	111° 3'	114° 8'	122° 4'	113° 4'	114° 0'	114° 4'	113° 4'	111° 40'
96° 9'	106° 6'	134° 2'	107° 6'	110° 5'	113° 5'	114° 0'	114° 4'	108° 6'	109° 6'	109° 6'	110° 8'	113° 5'	107° 8'	111° 43'
96° 5'	108° 4'	109° 5'	109° 9'	112° 5'	113° 4'	112° 2'	113° 4'	121° 6'	105° 6'	116° 4'	111° 0'	115° 4'	110° 4'	111° 43'
99° 4'	110° 6'	109° 8'	112° 4'	114° 5'	114° 4'	113° 4'	112° 5'	112° 6'	114° 7'	116° 4'	113° 4'	116° 2'	115° 4'	111° 45'
99° 6'	110° 5'	111° 0'	110° 9'	111° 0'	113° 4'	112° 6'	114° 2'	113° 4'	112° 3'	112° 4'	112° 5'	112° 5'	113° 6'	111° 80'
97° 5'	108° 8'	109° 4'	110° 9'	111° 2'	112° 8'	112° 4'	111° 5'	110° 6'	111° 5'	112° 0'	112° 6'	112° 9'	112° 4'	112° 13'
95° 9'	107° 6'	108° 4'	111° 5'	122° 4'	111° 0'	112° 4'	113° 6'	112° 4'	112° 4'	112° 4'	111° 6'	112° 8'	113° 3'	111° 71'
96° 3'	107° 2'	108° 0'	112° 4'	110° 2'	112° 4'	112° 5'	114° 4'	112° 2'	110° 5'	112° 2'	113° 3'	111° 6'	112° 0'	111° 56'
98° 2'	108° 8'	109° 7'	110° 7'	111° 3'	111° 8'	109° 3'	110° 4'	110° 4'	111° 8'	111° 8'	113° 4'	113° 6'	114° 0'	111° 74'
107° 99'	108° 88'	110° 64'	110° 82'	111° 87'	112° 52'	113° 19'	113° 52'	113° 33'	112° 35'	111° 70'	112° 59'	113° 59'	112° 94'	111° 42'

\* Two minutes late.

\* Christmas Day.

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0'721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
JANUARY.	1	113 <sup>h</sup> 4	113 <sup>h</sup> 5	116 <sup>h</sup> 8	116 <sup>h</sup> 2	114 <sup>h</sup> 2	110 <sup>h</sup> 2	111 <sup>h</sup> 2	110 <sup>h</sup> 8	110 <sup>h</sup> 0	108 <sup>h</sup> 7	107 <sup>h</sup> 7	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	112 <sup>h</sup> 8	112 <sup>h</sup> 6	116 <sup>h</sup> 2	119 <sup>h</sup> 4	119 <sup>h</sup> 4	116 <sup>h</sup> 5	113 <sup>h</sup> 2	111 <sup>h</sup> 3	106 <sup>h</sup> 9	99 <sup>h</sup> 4	97 <sup>h</sup> 4	105 <sup>h</sup> 6
	4	108 <sup>h</sup> 3	106 <sup>h</sup> 8	111 <sup>h</sup> 6	114 <sup>h</sup> 5	107 <sup>h</sup> 4	107 <sup>h</sup> 5	112 <sup>h</sup> 4	110 <sup>h</sup> 6	107 <sup>h</sup> 7	106 <sup>h</sup> 4	109 <sup>h</sup> 7	109 <sup>h</sup> 8
	5	113 <sup>h</sup> 9	114 <sup>h</sup> 5	116 <sup>h</sup> 9	118 <sup>h</sup> 6	118 <sup>h</sup> 6	114 <sup>h</sup> 9	110 <sup>h</sup> 9	109 <sup>h</sup> 2	108 <sup>h</sup> 6	108 <sup>h</sup> 4	107 <sup>h</sup> 6	110 <sup>h</sup> 4
	6	114 <sup>h</sup> 1	115 <sup>h</sup> 0	116 <sup>h</sup> 4	120 <sup>h</sup> 0	120 <sup>h</sup> 2	116 <sup>h</sup> 4	110 <sup>h</sup> 3	109 <sup>h</sup> 0	108 <sup>h</sup> 8	109 <sup>h</sup> 2	109 <sup>h</sup> 2	110 <sup>h</sup> 8
	7	113 <sup>h</sup> 4	110 <sup>h</sup> 4	106 <sup>h</sup> 6	114 <sup>h</sup> 4	112 <sup>h</sup> 0	110 <sup>h</sup> 2	109 <sup>h</sup> 0	107 <sup>h</sup> 8	107 <sup>h</sup> 4	106 <sup>h</sup> 7	108 <sup>h</sup> 4	111 <sup>h</sup> 0
	8	113 <sup>h</sup> 4	115 <sup>h</sup> 8	119 <sup>h</sup> 2	120 <sup>h</sup> 0	117 <sup>h</sup> 2	113 <sup>h</sup> 3	107 <sup>h</sup> 4	105 <sup>h</sup> 9	104 <sup>h</sup> 4	114 <sup>h</sup> 0	106 <sup>h</sup> 4	108 <sup>h</sup> 6
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	113 <sup>h</sup> 6	110 <sup>h</sup> 9	116 <sup>h</sup> 5	128 <sup>h</sup> 8	116 <sup>h</sup> 4	112 <sup>h</sup> 1	109 <sup>h</sup> 9	107 <sup>h</sup> 4	104 <sup>h</sup> 9	105 <sup>h</sup> 4	107 <sup>h</sup> 9	110 <sup>h</sup> 4
	11	112 <sup>h</sup> 9	116 <sup>h</sup> 0	118 <sup>h</sup> 8	121 <sup>h</sup> 6	116 <sup>h</sup> 6	112 <sup>h</sup> 4	107 <sup>h</sup> 5	104 <sup>h</sup> 2	100 <sup>h</sup> 6	104 <sup>h</sup> 1	107 <sup>h</sup> 0	108 <sup>h</sup> 2
	12	116 <sup>h</sup> 4	108 <sup>h</sup> 4	121 <sup>h</sup> 4	125 <sup>h</sup> 0	113 <sup>h</sup> 2	113 <sup>h</sup> 4	89 <sup>h</sup> 4	106 <sup>h</sup> 5	112 <sup>h</sup> 4	96 <sup>h</sup> 6	109 <sup>h</sup> 2	100 <sup>h</sup> 7
	13	111 <sup>h</sup> 7	109 <sup>h</sup> 8	101 <sup>h</sup> 9	105 <sup>h</sup> 4	113 <sup>h</sup> 2	115 <sup>h</sup> 4	111 <sup>h</sup> 6	105 <sup>h</sup> 4	99 <sup>h</sup> 6	107 <sup>h</sup> 7	100 <sup>h</sup> 2	107 <sup>h</sup> 4
	14	113 <sup>h</sup> 4	112 <sup>h</sup> 5	117 <sup>h</sup> 4	120 <sup>h</sup> 4	116 <sup>h</sup> 4	118 <sup>h</sup> 7	105 <sup>h</sup> 1	100 <sup>h</sup> 9	97 <sup>h</sup> 0	95 <sup>h</sup> 0	102 <sup>h</sup> 0	109 <sup>h</sup> 7
	15	113 <sup>h</sup> 4	114 <sup>h</sup> 2	111 <sup>h</sup> 2	112 <sup>h</sup> 0	112 <sup>h</sup> 2	111 <sup>h</sup> 8	106 <sup>h</sup> 7	106 <sup>h</sup> 6	106 <sup>h</sup> 0	107 <sup>h</sup> 6	108 <sup>h</sup> 8	108 <sup>h</sup> 4
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	113 <sup>h</sup> 0	114 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 4	111 <sup>h</sup> 6	110 <sup>h</sup> 4	107 <sup>h</sup> 8	106 <sup>h</sup> 4	106 <sup>h</sup> 5	107 <sup>h</sup> 5	107 <sup>h</sup> 3	108 <sup>h</sup> 4
	18	111 <sup>h</sup> 6	114 <sup>h</sup> 4	116 <sup>h</sup> 6	117 <sup>h</sup> 4	117 <sup>h</sup> 6	111 <sup>h</sup> 9	110 <sup>h</sup> 6	106 <sup>h</sup> 2	106 <sup>h</sup> 4	105 <sup>h</sup> 8	105 <sup>h</sup> 6	108 <sup>h</sup> 5
	19	113 <sup>h</sup> 4	112 <sup>h</sup> 4	113 <sup>h</sup> 6	131 <sup>h</sup> 6	121 <sup>h</sup> 0	111 <sup>h</sup> 8	106 <sup>h</sup> 2	101 <sup>h</sup> 9	103 <sup>h</sup> 0	105 <sup>h</sup> 4	106 <sup>h</sup> 8	107 <sup>h</sup> 5
	20	112 <sup>h</sup> 5	112 <sup>h</sup> 4	118 <sup>h</sup> 2	118 <sup>h</sup> 3	117 <sup>h</sup> 6	110 <sup>h</sup> 6	111 <sup>h</sup> 0	107 <sup>h</sup> 6	103 <sup>h</sup> 8	103 <sup>h</sup> 2	106 <sup>h</sup> 4	108 <sup>h</sup> 5
	21	112 <sup>h</sup> 3	113 <sup>h</sup> 9	114 <sup>h</sup> 5	118 <sup>h</sup> 2	116 <sup>h</sup> 1	112 <sup>h</sup> 7	109 <sup>h</sup> 5	105 <sup>h</sup> 9	104 <sup>h</sup> 8	105 <sup>h</sup> 9	107 <sup>h</sup> 6	103 <sup>h</sup> 4
	22	113 <sup>h</sup> 5	113 <sup>h</sup> 4	118 <sup>h</sup> 4	116 <sup>h</sup> 8	117 <sup>h</sup> 4	111 <sup>h</sup> 9	108 <sup>h</sup> 6	105 <sup>h</sup> 3	105 <sup>h</sup> 5	108 <sup>h</sup> 4	107 <sup>h</sup> 1	106 <sup>h</sup> 4
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	106 <sup>h</sup> 9	120 <sup>h</sup> 4	115 <sup>h</sup> 3	103 <sup>h</sup> 7	101 <sup>h</sup> 4	101 <sup>h</sup> 6	105 <sup>h</sup> 4	99 <sup>h</sup> 8	95 <sup>h</sup> 0	101 <sup>h</sup> 2	101 <sup>h</sup> 8	100 <sup>h</sup> 0
	25	114 <sup>h</sup> 5	110 <sup>h</sup> 0	118 <sup>h</sup> 4	115 <sup>h</sup> 4	112 <sup>h</sup> 2	107 <sup>h</sup> 4	101 <sup>h</sup> 9	97 <sup>h</sup> 4	95 <sup>h</sup> 4	99 <sup>h</sup> 4	103 <sup>h</sup> 8	101 <sup>h</sup> 6
	26	112 <sup>h</sup> 0	118 <sup>h</sup> 4	123 <sup>h</sup> 2	122 <sup>h</sup> 7	108 <sup>h</sup> 8	108 <sup>h</sup> 8	103 <sup>h</sup> 4	101 <sup>h</sup> 4	105 <sup>h</sup> 3	109 <sup>h</sup> 4	102 <sup>h</sup> 8	105 <sup>h</sup> 4
	27	115 <sup>h</sup> 8	112 <sup>h</sup> 5	122 <sup>h</sup> 4	120 <sup>h</sup> 3	119 <sup>h</sup> 2	114 <sup>h</sup> 0	104 <sup>h</sup> 6	101 <sup>h</sup> 2	103 <sup>h</sup> 8	105 <sup>h</sup> 6	106 <sup>h</sup> 2	106 <sup>h</sup> 7
	28	112 <sup>h</sup> 8	115 <sup>h</sup> 4	115 <sup>h</sup> 9	119 <sup>h</sup> 0	118 <sup>h</sup> 6	126 <sup>h</sup> 0	105 <sup>h</sup> 0	104 <sup>h</sup> 5	104 <sup>h</sup> 2	106 <sup>h</sup> 5	105 <sup>h</sup> 2	101 <sup>h</sup> 2
	29	116 <sup>h</sup> 6	115 <sup>h</sup> 0	119 <sup>h</sup> 0	115 <sup>h</sup> 9	118 <sup>h</sup> 4	113 <sup>h</sup> 8	108 <sup>h</sup> 5	106 <sup>h</sup> 2	107 <sup>h</sup> 4	107 <sup>h</sup> 4	107 <sup>h</sup> 8	109 <sup>h</sup> 0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	110 <sup>h</sup> 5	111 <sup>h</sup> 5	115 <sup>h</sup> 7	117 <sup>h</sup> 2	117 <sup>h</sup> 2	114 <sup>h</sup> 8	110 <sup>h</sup> 8	108 <sup>h</sup> 2	107 <sup>h</sup> 9	107 <sup>h</sup> 0	105 <sup>h</sup> 6	105 <sup>h</sup> 9
Hourly Means	112 <sup>h</sup> 93	113 <sup>h</sup> 25	116 <sup>h</sup> 13	117 <sup>h</sup> 97	115 <sup>h</sup> 27	112 <sup>h</sup> 75	107 <sup>h</sup> 61	105 <sup>h</sup> 91	101 <sup>h</sup> 63	105 <sup>h</sup> 46	105 <sup>h</sup> 98	107 <sup>h</sup> 17	
FEBRUARY.	1	117 <sup>h</sup> 5	118 <sup>h</sup> 1	120 <sup>h</sup> 1	124 <sup>h</sup> 2	121 <sup>h</sup> 7	122 <sup>h</sup> 3	118 <sup>h</sup> 4	115 <sup>h</sup> 5	113 <sup>h</sup> 7	112 <sup>h</sup> 2	111 <sup>h</sup> 5	114 <sup>h</sup> 4
	2	122 <sup>h</sup> 6	111 <sup>h</sup> 6	119 <sup>h</sup> 5	122 <sup>h</sup> 6	122 <sup>h</sup> 5	120 <sup>h</sup> 9	118 <sup>h</sup> 2	113 <sup>h</sup> 4	111 <sup>h</sup> 6	112 <sup>h</sup> 3	113 <sup>h</sup> 3	114 <sup>h</sup> 4
	3	115 <sup>h</sup> 9	120 <sup>h</sup> 6	121 <sup>h</sup> 4	124 <sup>h</sup> 4	122 <sup>h</sup> 8	119 <sup>h</sup> 6	116 <sup>h</sup> 4	114 <sup>h</sup> 5	113 <sup>h</sup> 3	112 <sup>h</sup> 6	112 <sup>h</sup> 1	113 <sup>h</sup> 4
	4	118 <sup>h</sup> 4	117 <sup>h</sup> 2	120 <sup>h</sup> 3	124 <sup>h</sup> 4	122 <sup>h</sup> 6	118 <sup>h</sup> 4	115 <sup>h</sup> 4	113 <sup>h</sup> 8	111 <sup>h</sup> 2	110 <sup>h</sup> 6	110 <sup>h</sup> 4	112 <sup>h</sup> 2
	5	117 <sup>h</sup> 6	118 <sup>h</sup> 6	123 <sup>h</sup> 2	126 <sup>h</sup> 0	120 <sup>h</sup> 8	118 <sup>h</sup> 6	116 <sup>h</sup> 4	115 <sup>h</sup> 1	114 <sup>h</sup> 3	114 <sup>h</sup> 1	114 <sup>h</sup> 2	115 <sup>h</sup> 4
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	120 <sup>h</sup> 8	121 <sup>h</sup> 4	123 <sup>h</sup> 0	126 <sup>h</sup> 6	122 <sup>h</sup> 2	118 <sup>h</sup> 2	114 <sup>h</sup> 4	113 <sup>h</sup> 9	109 <sup>h</sup> 5	106 <sup>h</sup> 4	109 <sup>h</sup> 6	105 <sup>h</sup> 6
	8	118 <sup>h</sup> 6	118 <sup>h</sup> 7	123 <sup>h</sup> 8	122 <sup>h</sup> 0	122 <sup>h</sup> 3	118 <sup>h</sup> 0	106 <sup>h</sup> 4	107 <sup>h</sup> 2	109 <sup>h</sup> 3	110 <sup>h</sup> 0	112 <sup>h</sup> 9	110 <sup>h</sup> 4
	9	124 <sup>h</sup> 2	121 <sup>h</sup> 0	124 <sup>h</sup> 2	133 <sup>h</sup> 0	123 <sup>h</sup> 8	116 <sup>h</sup> 6	115 <sup>h</sup> 4	108 <sup>h</sup> 8	107 <sup>h</sup> 4	108 <sup>h</sup> 5	104 <sup>h</sup> 4	110 <sup>h</sup> 4
	10	117 <sup>h</sup> 6	120 <sup>h</sup> 0	124 <sup>h</sup> 7	126 <sup>h</sup> 2	127 <sup>h</sup> 4	122 <sup>h</sup> 4	117 <sup>h</sup> 6	115 <sup>h</sup> 8	111 <sup>h</sup> 4	110 <sup>h</sup> 2	111 <sup>h</sup> 8	109 <sup>h</sup> 4
	11	118 <sup>h</sup> 5	115 <sup>h</sup> 7	122 <sup>h</sup> 8	128 <sup>h</sup> 2	127 <sup>h</sup> 2	122 <sup>h</sup> 0	116 <sup>h</sup> 4	111 <sup>h</sup> 4	109 <sup>h</sup> 3	109 <sup>h</sup> 4	109 <sup>h</sup> 3	110 <sup>h</sup> 4
	12	118 <sup>h</sup> 8	119 <sup>h</sup> 0	116 <sup>h</sup> 2	117 <sup>h</sup> 2	120 <sup>h</sup> 2	121 <sup>h</sup> 4	119 <sup>h</sup> 7	117 <sup>h</sup> 4	114 <sup>h</sup> 4	112 <sup>h</sup> 4	113 <sup>h</sup> 1	112 <sup>h</sup> 6
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	118 <sup>h</sup> 4	119 <sup>h</sup> 0	121 <sup>h</sup> 5	123 <sup>h</sup> 7	124 <sup>h</sup> 6	124 <sup>h</sup> 3	119 <sup>h</sup> 2	116 <sup>h</sup> 6	115 <sup>h</sup> 0	111 <sup>h</sup> 6	106 <sup>h</sup> 0	93 <sup>h</sup> 4
	15	121 <sup>h</sup> 4	119 <sup>h</sup> 2	110 <sup>h</sup> 4	118 <sup>h</sup> 4	120 <sup>h</sup> 0	118 <sup>h</sup> 0	110 <sup>h</sup> 0	107 <sup>h</sup> 5	107 <sup>h</sup> 7	110 <sup>h</sup> 6	113 <sup>h</sup> 5	110 <sup>h</sup> 4
	16	119 <sup>h</sup> 4	120 <sup>h</sup> 4	123 <sup>h</sup> 0	121 <sup>h</sup> 8	122 <sup>h</sup> 6	117 <sup>h</sup> 4	113 <sup>h</sup> 3	112 <sup>h</sup> 4	112 <sup>h</sup> 4	113 <sup>h</sup> 2	112 <sup>h</sup> 4	112 <sup>h</sup> 4
	17	119 <sup>h</sup> 3	121 <sup>h</sup> 5	127 <sup>h</sup> 0	125 <sup>h</sup> 4	123 <sup>h</sup> 6	118 <sup>h</sup> 6	114 <sup>h</sup> 6	112 <sup>h</sup> 5	111 <sup>h</sup> 7	112 <sup>h</sup> 4	113 <sup>h</sup> 3	113 <sup>h</sup> 9
	18	120 <sup>h</sup> 2	122 <sup>h</sup> 4	125 <sup>h</sup> 6	126 <sup>h</sup> 4	124 <sup>h</sup> 7	118 <sup>h</sup> 6	113 <sup>h</sup> 4	109 <sup>h</sup> 8	108 <sup>h</sup> 5	110 <sup>h</sup> 3	112 <sup>h</sup> 6	114 <sup>h</sup> 4
	19	124 <sup>h</sup> 4	124 <sup>h</sup> 0	124 <sup>h</sup> 6	127 <sup>h</sup> 4	117 <sup>h</sup> 4	111 <sup>h</sup> 5	106 <sup>h</sup> 0	101 <sup>h</sup> 6	107 <sup>h</sup> 4	110 <sup>h</sup> 4	112 <sup>h</sup> 2	112 <sup>h</sup> 6
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21 <sup>a</sup>	110 <sup>h</sup> 4	98 <sup>h</sup> 0	131 <sup>h</sup> 8	131 <sup>h</sup> 0	125 <sup>h</sup> 4	120 <sup>h</sup> 0	119 <sup>h</sup> 8	116 <sup>h</sup> 6	109 <sup>h</sup> 8	100 <sup>h</sup> 0	127 <sup>h</sup> 5	141 <sup>h</sup> 8
	22 <sup>b</sup>	121 <sup>h</sup> 4	128 <sup>h</sup> 3	125 <sup>h</sup> 4	126 <sup>h</sup> 4	123 <sup>h</sup> 6	120 <sup>h</sup> 6	116 <sup>h</sup> 2	108 <sup>h</sup> 8	101 <sup>h</sup> 6	89 <sup>h</sup> 0	103 <sup>h</sup> 8	105 <sup>h</sup> 9
	23	122 <sup>h</sup> 4	119 <sup>h</sup> 4	123 <sup>h</sup> 6	124 <sup>h</sup> 2	121 <sup>h</sup> 6	118 <sup>h</sup> 8	122 <sup>h</sup> 5	121 <sup>h</sup> 4	112 <sup>h</sup> 0	108 <sup>h</sup> 3	107 <sup>h</sup> 2	109 <sup>h</sup> 8
	24	104 <sup>h</sup> 2	109 <sup>h</sup> 5	105 <sup>h</sup> 8	119 <sup>h</sup> 5	110 <sup>h</sup> 7	114 <sup>h</sup> 3	113 <sup>h</sup> 0	114 <sup>h</sup> 7	109 <sup>h</sup> 5	111 <sup>h</sup> 4	125 <sup>h</sup> 1	113 <sup>h</sup> 4
	25	119 <sup>h</sup> 6	104 <sup>h</sup> 3	106 <sup>h</sup> 4	116 <sup>h</sup> 7	125 <sup>h</sup> 6	121 <sup>h</sup> 4	115 <sup>h</sup> 7	115 <sup>h</sup> 2	114 <sup>h</sup> 0	114 <sup>h</sup> 2	112 <sup>h</sup> 4	117 <sup>h</sup> 3
	26	118 <sup>h</sup> 5	119 <sup>h</sup> 0	122 <sup>h</sup> 3	125 <sup>h</sup> 4	126 <sup>h</sup> 4	121 <sup>h</sup> 8	120 <sup>h</sup> 0	115 <sup>h</sup> 4	114 <sup>h</sup> 0	111 <sup>h</sup> 2	112 <sup>h</sup> 3	112 <sup>h</sup> 4
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	115 <sup>h</sup> 6	113 <sup>h</sup> 4	124 <sup>h</sup> 4	128 <sup>h</sup> 3	120 <sup>h</sup> 6	122 <sup>h</sup> 5	115 <sup>h</sup> 5	110 <sup>h</sup> 4	103 <sup>h</sup> 6	106 <sup>h</sup> 4		

DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0'.721. Increasing Numbers denote decreasing Westerly Declination.													
12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Means.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
108°4	109°4	111°4	112°6	110°8	112°8	—	—	—	—	—	—	—	111°63
107°8	107°0	115°4	118°7	118°4	119°4	112°6	112°3	112°4	111°4	111°4	112°8	112°5	113°85
110°6	111°5	112°3	112°4	112°0	112°2	111°2	112°4	111°8	109°4	112°3	113°0	113°0	110°57
110°8	111°4	111°8	113°2	112°0	111°8	110°7	112°9	111°9	111°9	109°5	113°4	113°4	112°24
111°6	111°7	111°7	112°4	112°0	113°5	112°8	113°7	114°0	116°7	111°4	113°4	113°4	113°10
111°2	111°5	112°0	115°4	117°0	112°5	110°6	113°2	112°8	113°2	112°5	111°8	111°8	111°29
108°8	111°5	111°4	111°4	110°8	110°4	—	—	—	—	—	—	—	111°54
—	—	—	—	—	—	112°2	112°4	111°2	114°6	110°2	111°4	111°4	111°33
110°6	109°6	111°4	111°2	112°4	112°6	112°8	113°7	113°4	113°4	114°2	114°0	114°0	112°35
109°6	120°0	126°4	120°4	118°2	108°4	113°5	112°0	111°5	117°5	121°0	118°4	118°4	113°87
113°2	110°0	110°4	108°0	108°8	110°8	111°0	111°6	111°6	113°4	104°9	108°8	108°8	109°92
108°2	106°8	109°0	114°3	112°4	109°9	108°6	109°7	108°5	110°2	108°2	109°2	108°51	108°51
109°3	117°6	111°4	111°4	109°9	109°2	108°9	109°2	109°5	110°4	109°6	112°5	109°85	109°85
108°4	108°4	109°3	109°4	109°4	110°2	—	—	—	—	—	—	—	109°54
—	—	—	—	—	—	110°6	113°5	113°0	110°5	110°4	111°0	111°0	110°66
108°6	107°4	110°6	110°6	110°8	115°4	111°6	112°2	111°5	111°5	112°2	111°4	111°4	110°66
107°5	109°2	111°4	112°4	113°0	110°9	111°0	111°9	112°3	112°4	113°6	112°3	111°40	111°40
107°6	109°7	111°0	116°1	113°3	113°4	111°3	112°6	111°4	107°6	117°4	112°2	111°55	111°55
109°5	110°9	111°6	110°4	111°7	112°4	113°2	112°4	110°0	112°5	112°2	113°4	111°26	111°26
109°4	108°7	109°9	110°8	110°8	110°6	110°4	111°2	110°9	111°5	111°6	111°4	110°38	110°38
110°2	107°6	111°4	109°6	115°2	111°7	—	—	—	—	—	—	—	111°17
—	—	—	—	—	—	112°7	112°8	111°4	116°8	115°0	123°6	—	112°11
110°0	108°7	110°3	110°8	111°0	112°8	109°4	110°4	111°4	111°4	112°8	112°6	107°50	107°50
105°0	111°5	111°2	111°0	112°6	111°6	111°0	111°4	114°2	114°4	113°4	111°8	109°10	109°10
106°6	106°6	112°4	107°5	111°5	115°4	108°6	109°4	108°4	114°4	114°2	113°9	110°44	110°44
108°3	108°5	110°3	110°4	111°4	115°4	124°0	119°5	117°4	123°4	125°5	110°1	113°31	113°31
110°4	119°4	136°5	121°4	120°3	118°8	129°6	108°9	110°2	106°2	130°0	128°4	115°73	115°73
108°8	108°7	109°2	109°2	110°0	110°2	—	—	—	—	—	—	—	111°39
—	—	—	—	—	—	115°4	113°1	109°2	111°6	113°6	109°4	111°39	111°39
107°0	108°0	108°8	109°5	109°6	110°4	110°5	110°7	110°5	110°2	111°3	112°4	110°47	110°47
108°86	110°40	112°87	112°33	112°51	112°41	112°95	112°17	111°53	113°27	114°07	113°27	111°32	111°32
114°6	115°3	116°2	116°4	122°6	116°0	120°5	116°4	116°6	118°8	110°8	116°2	117°08	117°08
115°4	115°6	116°4	116°4	117°6	118°8	116°4	116°1	116°8	117°8	117°1	117°0	116°86	116°86
115°5	115°6	116°8	120°6	124°4	120°2	120°3	120°4	119°0	119°0	119°4	117°6	118°13	118°13
113°3	115°3	116°5	116°0	118°3	117°8	117°0	116°6	117°4	116°6	117°1	117°6	116°43	116°43
117°0	117°4	116°8	119°8	116°6	116°5	—	—	—	—	—	—	—	120°08
—	—	—	—	—	—	110°0	134°4	119°6	130°6	116°4	122°6	—	120°08
108°9	107°6	111°4	117°2	122°3	121°4	117°5	118°8	115°6	116°4	117°0	117°4	115°96	115°96
111°5	112°4	108°4	123°8	124°4	130°2	129°4	124°7	125°5	115°7	109°3	112°2	116°42	116°42
110°2	111°4	122°4	113°3	123°5	118°4	117°9	117°8	116°4	116°6	116°2	116°0	116°58	116°58
111°4	111°4	116°6	116°4	117°9	118°6	118°0	116°3	116°6	116°1	116°9	117°4	117°14	117°14
112°0	112°8	115°6	116°5	117°4	117°8	118°4	119°4	117°7	119°2	118°4	118°6	116°85	116°85
113°3	114°4	115°4	116°5	120°6	116°3	—	—	—	—	—	—	—	117°05
—	—	—	—	—	—	120°6	118°2	117°8	118°4	117°6	117°6	116°48	116°48
107°4	112°2	115°8	115°2	115°0	121°6	121°6	122°1	120°7	121°2	113°4	116°0	116°48	116°48
112°4	113°0	111°4	115°2	116°3	118°0	117°5	117°2	120°0	118°8	122°4	121°4	115°57	115°57
114°7	116°3	115°7	117°0	117°2	119°8	117°8	113°4	120°0	118°4	119°6	121°4	117°29	117°29
111°4	115°0	116°2	116°4	116°6	116°7	115°4	116°3	117°0	117°6	118°4	119°0	117°20	117°20
115°0	115°4	115°6	116°4	116°2	116°2	117°3	123°6	119°6	119°0	120°6	118°8	117°52	117°52
114°3	114°4	114°4	112°1	112°4	120°5	—	—	—	—	—	—	—	115°20
—	—	—	—	—	—	118°4	121°2	91°2	121°2	123°9	118°2	—	115°20
117°8	106°8	116°4	293°5	128°9	128°5	119°2	120°0	118°0	118°8	116°4	121°0	126°56	126°56
107°3	123°4	116°8	118°4	117°8	128°4	120°4	83°4	97°6	104°6	102°6	107°4	112°46	112°46
110°2	114°8	116°5	126°6	127°4	131°8	128°4	132°0	126°0	114°4	121°0	104°2	120°31	120°31
112°4	110°6	116°4	117°7	110°4	116°1	143°0	121°2	112°4	122°8	98°4	130°5	115°14	115°14
121°0	112°4	115°4	120°8	119°8	116°5	115°6	116°4	115°8	116°8	116°8	117°4	116°27	116°27
113°8	114°8	116°2	136°2	118°4	118°4	—	—	—	—	—	—	—	117°94
—	—	—	—	—	—	116°8	117°0	113°4	113°0	113°8	120°0	115°74	115°74
113°4	115°2	116°3	116°8	117°0	116°6	118°3	116°6	113°6	118°3	111°4	120°0	115°74	115°74
112°2	115°4	114°8	111°2	134°5	130°4	117°6	117°1	117°4	113°6	119°0	119°2	118°07	118°07
113°23	113°99	115°66	118°02	119°43	120°20	121°03	120°27	116°22	118°29	116°44	118°10	117°01	117°01

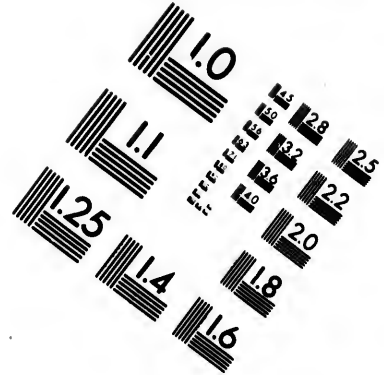
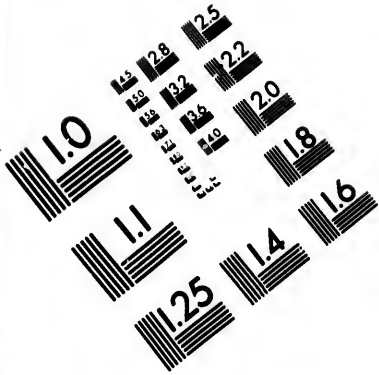
DECLINATION.													12 <sup>h</sup>													
Angular Value of one Scale Division of the Declinometer = 0' 721. Increasing Numbers denote decreasing Westerly Declination.																										
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup>													
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.													
<b>MARCH.</b>																										
														1	119° 6'	121° 4'	124° 4'	125° 8'	120° 7'	119° 7'	114° 5'	115° 4'	112° 4'	112° 4'	114° 3'	113° 0'
														2	119° 7'	121° 8'	124° 3'	126° 5'	125° 4'	123° 4'	118° 5'	113° 4'	112° 2'	111° 8'	112° 4'	113° 5'
														3	118° 4'	121° 6'	124° 4'	125° 0'	121° 3'	118° 6'	111° 4'	108° 6'	108° 4'	110° 2'	112° 6'	114° 2'
														4	118° 3'	120° 8'	126° 2'	126° 5'	122° 4'	115° 4'	109° 6'	107° 4'	107° 6'	109° 6'	110° 8'	113° 1'
														5	—	—	—	—	—	—	—	—	—	—	—	—
														6	122° 5'	124° 6'	126° 6'	123° 8'	119° 6'	112° 4'	110° 4'	106° 4'	104° 4'	105° 4'	107° 5'	109° 6'
														7	122° 4'	126° 2'	128° 4'	128° 2'	121° 4'	116° 3'	108° 4'	109° 4'	108° 9'	110° 9'	114° 0'	113° 2'
														8	125° 9'	125° 9'	129° 6'	132° 4'	122° 6'	116° 3'	102° 2'	103° 6'	102° 6'	103° 4'	103° 5'	109° 7'
														9	120° 4'	124° 4'	127° 4'	126° 6'	121° 7'	114° 6'	107° 6'	104° 4'	104° 3'	104° 6'	108° 6'	115° 5'
														10	121° 6'	125° 0'	128° 3'	129° 2'	127° 4'	122° 4'	116° 6'	115° 2'	109° 0'	108° 4'	110° 2'	112° 4'
														11	121° 3'	124° 4'	127° 0'	128° 4'	125° 8'	120° 6'	114° 4'	112° 1'	109° 4'	108° 4'	110° 2'	111° 6'
														12	—	—	—	—	—	—	—	—	—	—	—	—
														13	122° 4'	125° 4'	126° 8'	127° 4'	122° 6'	118° 4'	112° 4'	109° 4'	107° 9'	107° 9'	109° 4'	111° 7'
														14	122° 0'	119° 5'	122° 4'	124° 9'	117° 8'	115° 4'	109° 6'	106° 6'	106° 2'	106° 4'	109° 1'	110° 5'
														15	123° 2'	121° 4'	113° 5'	107° 4'	99° 4'	112° 6'	105° 7'	107° 2'	110° 2'	114° 5'	114° 5'	115° 2'
														16	131° 6'	130° 8'	132° 6'	127° 4'	121° 6'	115° 2'	113° 4'	111° 8'	108° 2'	112° 2'	112° 6'	114° 4'
														17	112° 0'	107° 6'	119° 2'	116° 4'	118° 2'	108° 6'	110° 2'	114° 5'	125° 2'	117° 4'	114° 7'	118° 0'
														18	120° 4'	120° 4'	121° 8'	122° 7'	118° 4'	113° 6'	110° 9'	111° 0'	108° 4'	109° 5'	108° 4'	110° 4'
														19	—	—	—	—	—	—	—	—	—	—	—	—
														20	109° 7'	106° 4'	114° 5'	101° 3'	105° 4'	105° 3'	104° 4'	107° 8'	136° 6'	120° 0'	117° 6'	114° 8'
														21	126° 4'	126° 2'	123° 0'	129° 0'	126° 6'	115° 6'	111° 6'	109° 5'	107° 6'	108° 4'	110° 0'	112° 4'
														22	120° 6'	122° 4'	123° 4'	123° 6'	122° 2'	115° 4'	110° 2'	101° 6'	103° 8'	104° 2'	107° 8'	109° 0'
														23	119° 4'	122° 4'	125° 5'	123° 6'	121° 5'	117° 0'	112° 4'	106° 4'	103° 6'	104° 6'	108° 6'	110° 4'
														24	118° 4'	114° 4'	120° 0'	123° 4'	122° 5'	115° 5'	111° 0'	105° 5'	101° 8'	102° 5'	107° 8'	109° 4'
														25	114° 5'	129° 3'	123° 3'	123° 4'	99° 6'	108° 4'	117° 6'	112° 4'	112° 4'	113° 6'	112° 6'	107° 2'
														26	—	—	—	—	—	—	—	—	—	—	—	—
														27	121° 0'	126° 4'	126° 4'	122° 3'	118° 6'	114° 6'	109° 3'	105° 6'	107° 5'	108° 4'	111° 5'	111° 2'
														28	120° 4'	122° 4'	123° 6'	123° 4'	120° 6'	118° 4'	108° 5'	107° 2'	108° 0'	108° 4'	110° 8'	112° 4'
														29	120° 4'	122° 4'	126° 4'	126° 4'	121° 4'	112° 4'	106° 4'	104° 3'	104° 2'	107° 8'	110° 2'	113° 5'
														30	116° 4'	125° 2'	126° 0'	125° 3'	122° 5'	117° 6'	111° 7'	109° 0'	106° 5'	106° 2'	107° 4'	106° 6'
31	113° 6'	114° 9'	122° 5'	119° 4'	121° 4'	117° 6'	106° 0'	103° 4'	105° 6'	110° 4'	110° 7'	110° 4'														
Hourly Means	120° 09	121° 99	124° 35	123° 77	119° 58	115° 60	110° 55	108° 60	109° 00	109° 17	110° 66	111° 97	113° 74													
<b>APRIL.</b>																										
														1	122° 4'	121° 3'	121° 2'	127° 2'	121° 6'	115° 8'	111° 6'	108° 6'	107° 8'	109° 4'	113° 3'	112° 8'
														2	—	—	—	—	—	—	—	—	—	—	—	—
														3	103° 4'	108° 6'	107° 6'	120° 2'	116° 6'	115° 8'	114° 2'	111° 6'	104° 4'	108° 6'	123° 3'	115° 9'
														4	122° 8'	127° 2'	128° 0'	129° 2'	129° 0'	112° 8'	105° 8'	103° 4'	107° 4'	106° 6'	108° 3'	111° 0'
														5	129° 0'	118° 0'	110° 4'	98° 0'	118° 6'	117° 6'	114° 2'	109° 5'	113° 4'	113° 4'	122° 2'	116° 4'
														6	121° 4'	128° 7'	132° 1'	127° 1'	124° 4'	119° 0'	113° 5'	106° 7'	105° 4'	107° 6'	110° 6'	115° 4'
														7	129° 0'	118° 0'	110° 4'	98° 0'	118° 6'	117° 6'	114° 2'	109° 5'	113° 4'	113° 4'	122° 2'	116° 4'
														8	115° 6'	122° 4'	124° 6'	123° 2'	119° 5'	116° 6'	112° 6'	109° 6'	109° 4'	110° 4'	112° 6'	113° 9'
														9	—	—	—	—	—	—	—	—	—	—	—	—
														10	119° 6'	124° 2'	124° 4'	122° 4'	118° 6'	113° 4'	110° 4'	107° 0'	106° 4'	108° 4'	111° 4'	113° 4'
														11	120° 5'	120° 4'	120° 6'	120° 5'	116° 6'	111° 8'	109° 4'	106° 4'	108° 4'	109° 7'	113° 0'	115° 0'
														12	119° 4'	120° 3'	123° 5'	121° 3'	117° 8'	114° 0'	112° 6'	111° 6'	111° 3'	112° 6'	113° 0'	113° 6'
														13	120° 0'	122° 4'	123° 0'	122° 6'	118° 1'	113° 6'	108° 6'	105° 6'	106° 0'	108° 9'	111° 6'	113° 2'
														14	123° 4'	125° 0'	125° 0'	123° 4'	119° 4'	113° 2'	109° 6'	107° 4'	107° 2'	109° 2'	112° 4'	111° 0'
														15	124° 2'	125° 9'	124° 4'	119° 4'	115° 8'	112° 4'	110° 2'	105° 4'	105° 3'	103° 6'	102° 6'	107° 8'
														16	—	—	—	—	—	—	—	—	—	—	—	—
														17	122° 4'	123° 4'	124° 4'	121° 8'	121° 2'	112° 4'	108° 3'	108° 2'	108° 4'	104° 3'	106° 0'	101° 3'
														18	120° 3'	121° 4'	122° 4'	119° 2'	115° 4'	110° 4'	108° 8'	106° 8'	104° 4'	105° 4'	108° 7'	113° 7'
														19	119° 2'	122° 5'	122° 7'	120° 4'	117° 4'	113° 6'	110° 7'	107° 7'	107° 6'	108° 4'	111° 5'	113° 2'
														20	121° 4'	122° 6'	122° 4'	122° 7'	120° 4'	117° 2'	113° 9'	109° 6'	107° 2'	108° 3'	109° 4'	112° 3'
														21	—	—	—	—	—	—	—	—	—	—	—	—
														22	120° 6'	127° 4'	117° 5'	119° 4'	113° 4'	115° 4'	108° 5'	105° 7'	106° 6'	107° 4'	110° 8'	114° 3'
														23	—	—	—	—	—	—	—	—	—	—	—	—
														24	120° 5'	121° 0'	121° 6'	122° 6'	118° 0'	112° 2'	109° 2'	108° 6'	108° 6'	110° 4'	111° 6'	114° 4'
														25	121° 0'	124° 0'	126° 8'	122° 8'	118° 4'	114° 4'	111° 5'	107° 4'	107° 4'	108° 5'	110° 4'	113° 4'
														26	122° 4'	125° 2'	125° 9'	122° 4'	116° 4'	110° 8'	109° 2'	110° 4'	110° 3'	111° 3'	112° 7'	114° 4'
														27	120° 4'	123° 2'	124° 4'	123° 1'	118° 9'	112° 5'	110° 3'	110° 4'	110° 4'	111° 7'	113° 8'	115° 0'
														28	121° 7'	124° 3'	123° 2'	121° 2'	118° 5'	111° 3'	108° 0'	107° 8'	107° 0'	109° 0'	110° 6'	113° 2'
														29	130° 0'	123° 5'	130° 0'	121° 2'	110° 2'	101° 9'	98° 2'	107° 4'	106° 2'	108° 4'	110° 4'	106° 4'
30	—	—	—	—	—	—	—	—	—	—	—	—														
Hourly Means	121° 40	122° 54	122° 48	120° 66	118° 45	113° 57	110° 15	108° 01	107° 91	108° 95	112° 18	113° 18	115° 83													



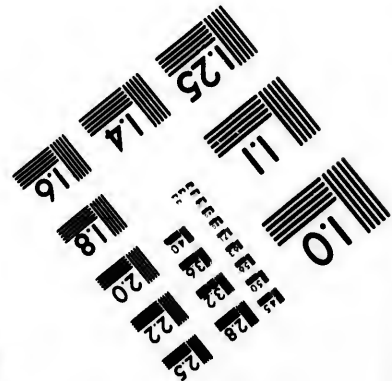
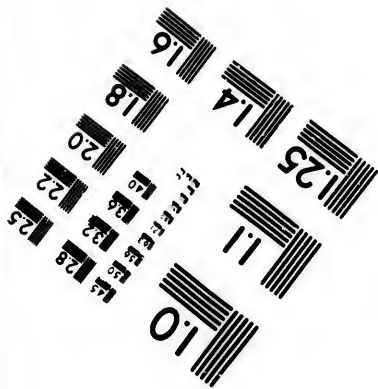
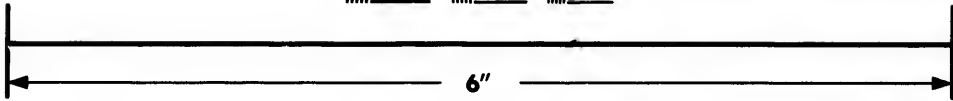
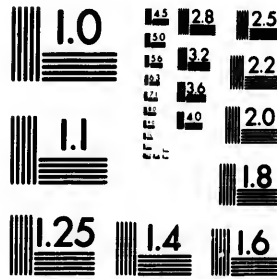
DECLINATION.  
Angular Value of one Scale Division of the Declinometer = 0".721. Increasing Numbers denote decreasing Westerly Declination.

0h.	1h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
119°4	115°4	115°6	113°4	120°4	116°4	118°4	115°4	117°8	118°6	117°8	118°6	117°8	119°4	118°47
114°6	115°4	115°9	116°2	116°2	117°6	116°6	117°4	117°8	118°0	117°9	117°9	116°0	116°0	117°60
115°2	115°6	116°4	118°2	117°4	117°3	116°7	117°0	116°4	116°2	117°0	116°2	117°0	118°6	116°53
115°4	116°3	117°2	118°4	118°0	117°4	—	—	—	—	—	—	—	—	116°59
110°0	111°4	111°6	117°4	115°8	117°4	120°4	121°5	121°2	119°4	121°4	119°8	120°2	119°8	115°85
114°2	114°8	115°8	115°8	117°4	117°4	117°4	121°4	120°8	120°4	122°2	121°2	121°2	117°8	117°77
113°2	114°2	113°2	115°2	121°8	127°6	120°4	122°4	120°4	118°6	118°7	117°8	116°72	117°8	116°72
112°8	112°4	115°4	116°7	118°5	117°4	117°5	117°7	118°3	118°4	119°0	119°4	119°4	119°3	115°98
113°4	111°4	115°5	116°4	116°9	120°0	119°4	117°6	118°4	119°4	118°4	118°4	119°3	118°12	118°12
112°0	114°5	115°4	115°8	117°2	117°4	—	—	—	—	—	—	—	—	117°77
112°8	115°6	116°3	118°4	118°5	119°4	120°4	120°4	120°0	120°2	120°6	119°4	117°65	119°4	117°65
113°2	114°2	116°2	118°4	120°2	120°4	124°6	130°8	122°6	124°7	122°4	125°4	117°55	125°4	117°55
115°2	116°2	117°2	117°4	116°7	118°0	130°3	128°2	127°0	128°0	121°8	118°4	116°63	118°4	116°63
114°9	115°4	115°9	114°0	114°1	133°6	115°8	116°6	144°9	135°6	137°3	124°4	121°45	124°4	121°45
117°4	111°4	112°6	114°4	115°6	115°0	115°4	115°4	117°2	118°4	118°6	119°4	118°6	119°4	116°34
110°4	111°4	111°6	114°5	113°9	115°2	—	—	—	—	—	—	—	—	115°40
120°0	114°1	107°2	111°8	109°4	124°4	126°2	113°2	118°6	116°7	124°4	121°5	114°65	121°5	114°65
116°2	113°2	114°2	115°2	115°5	115°7	—	—	—	—	—	—	—	—	116°54
110°4	109°3	114°6	115°5	116°4	114°4	—	—	—	—	—	—	—	—	114°64
113°4	113°0	114°8	121°4	117°2	118°0	120°0	118°4	128°2	127°8	127°8	112°8	116°75	112°8	116°75
111°2	112°6	114°3	119°4	121°7	145°4	128°0	124°4	126°4	124°6	120°5	117°5	117°42	117°5	117°42
105°6	111°5	113°0	113°8	115°2	119°2	—	—	—	—	—	—	—	—	114°88
117°4	110°4	112°6	112°9	114°7	131°9	117°6	115°4	115°0	126°2	122°0	118°6	116°56	118°6	116°56
113°4	114°4	115°0	122°8	120°9	117°8	117°0	117°3	115°6	119°4	117°0	118°6	116°39	118°6	116°39
114°0	114°4	114°4	117°6	115°2	115°6	117°6	117°4	116°1	119°4	119°4	112°5	115°40	119°4	115°40
111°6	108°2	109°6	117°9	121°2	116°6	124°4	123°5	121°8	122°0	119°3	116°5	116°50	119°3	116°50
113°7	111°6	110°7	143°2	126°6	117°4	123°5	130°5	119°8	109°7	122°6	115°0	116°67	115°0	116°67
113°74	113°39	111°16	118°37	117°50	120°14	119°87	119°22	120°59	120°63	120°63	118°38	116°74	118°38	116°74
113°1	124°2	118°8	132°7	116°5	121°7	—	—	—	—	—	—	—	—	118°16
109°3	107°0	117°0	129°0	126°0	110°0	128°0	120°2	112°3	112°0	123°5	113°6	118°16	113°6	118°16
112°8	113°0	113°4	113°3	119°4	115°4	118°4	118°5	116°5	115°5	119°0	119°2	117°8	119°2	117°8
112°8	117°4	119°6	115°4	115°8	137°4	135°0	122°1	115°4	115°8	110°0	105°6	116°80	110°0	105°6
117°3	116°5	122°8	131°6	111°4	108°5	118°4	102°8	110°4	165°0	156°0	133°0	122°48	165°0	156°0
112°8	117°4	119°6	115°4	115°8	137°4	135°0	132°4	115°4	115°8	110°0	105°6	116°80	110°0	105°6
114°6	113°8	114°1	114°5	114°5	113°8	—	—	—	—	—	—	—	—	116°06
113°0	114°0	114°2	114°6	114°7	116°2	118°4	118°9	113°2	120°6	119°4	119°2	116°06	119°4	119°2
115°4	115°4	115°4	115°2	115°5	116°4	116°7	117°8	119°4	120°1	119°0	119°5	115°27	119°0	119°5
113°7	114°3	115°0	115°4	115°6	116°4	117°2	117°6	118°7	119°1	119°1	118°8	116°34	119°1	118°8
114°1	114°4	114°5	114°6	117°7	116°3	116°7	116°9	117°0	119°8	119°0	121°4	115°68	119°0	121°4
111°4	114°5	114°7	114°3	115°5	116°6	116°0	118°4	118°0	118°6	119°1	121°5	116°28	119°1	121°5
110°0	125°6	116°0	109°4	108°0	115°6	—	—	—	—	—	—	—	—	114°31
105°4	112°4	142°2	113°6	116°6	118°8	116°4	122°2	118°2	118°4	118°5	118°8	116°23	118°4	118°5
114°6	114°5	112°8	119°4	117°2	115°4	115°8	116°5	119°4	120°3	120°2	119°8	115°12	120°3	120°2
113°8	114°4	115°6	116°3	116°6	117°4	119°0	119°9	118°2	118°4	119°0	118°3	115°91	119°0	118°3
112°8	114°5	129°7	120°5	122°4	121°8	—	—	—	—	—	—	—	—	124°03
112°4	114°4	118°6	116°0	116°8	117°0	129°2	149°4	175°4	143°8	135°8	131°0	114°71	143°8	135°8
115°1	122°8	121°2	119°1	120°4	116°8	108°4	116°4	117°3	117°4	115°4	116°0	114°71	117°4	115°4
115°1	116°9	119°2	116°4	116°0	116°4	116°7	117°0	116°5	117°5	117°2	117°4	116°58	117°0	116°5
111°0	113°8	115°1	115°1	116°2	116°6	117°2	118°0	118°4	118°6	117°6	119°5	116°33	118°0	118°0
115°2	115°4	118°4	120°4	116°4	116°4	117°8	119°4	120°2	120°8	121°2	123°4	117°47	120°8	121°2
115°3	114°5	114°5	114°8	115°8	128°2	115°4	131°5	139°5	137°7	138°3	124°4	119°53	137°7	138°3
123°8	127°2	121°4	118°3	114°8	118°4	—	—	—	—	—	—	—	—	116°33
113°83	116°18	118°50	117°87	117°73	118°66	118°88	119°22	120°61	122°14	121°19	119°43	116°82	121°19	119°43





**IMAGE EVALUATION  
TEST TARGET (MT-3)**



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Corporation**

23 WEST MAIN STREET  
WEBSTER, N.Y. 14580  
(716) 872-4503

1.5 2.8 2.5  
1.8 2.2  
2.0  
2.5

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DECLINATION.													
Angular Value of one Scale Division of the Declinometer = 0° 721. Increasing Numbers denote decreasing Westerly Declination.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
MAY.	1	122°6	124°0	124°8	124°6	118°3	112°4	109°6	107°2	106°8	106°6	112°4	113°5
	2	121°0	121°4	122°7	122°2	117°4	110°2	107°4	103°8	104°4	105°5	108°8	111°8
	3	126°8	128°4	128°8	122°5	116°4	113°8	105°3	101°5	103°4	106°4	109°6	119°0
	4	130°5	132°6	132°2	130°8	119°4	118°0	104°2	102°6	101°6	105°0	109°4	113°6
	5	125°0	127°7	125°4	122°6	116°6	109°6	104°4	99°4	96°6	102°4	108°6	112°8
	6	124°4	120°4	124°4	127°4	125°2	119°2	113°5	108°6	106°4	108°4	110°8	112°7
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	114°4	116°4	111°3	108°2	106°6	108°2	108°8	107°7	108°4	116°0	112°4	109°6
	9	123°4	125°0	122°4	116°9	112°0	113°4	113°4	110°4	108°8	105°2	105°3	108°8
	10	109°3	115°9	111°6	110°4	115°6	123°4	102°4	104°6	102°4	107°6	107°8	114°5
	11	123°4	126°5	122°0	124°6	117°2	113°8	110°3	109°2	109°0	109°4	111°5	113°4
	12	126°5	125°4	126°0	121°5	112°4	107°0	105°4	103°4	104°8	107°4	110°4	112°7
	13	123°8	127°7	123°0	123°8	116°0	107°4	104°0	101°3	104°0	108°9	113°1	115°9
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	121°4	128°4	127°2	123°3	117°4	112°3	109°3	107°2	105°4	108°6	112°9	115°4
	16	124°4	126°2	126°9	123°4	117°4	106°4	103°4	101°8	105°4	107°0	110°0	115°6
	17	125°4	133°4	130°6	130°8	116°4	112°6	104°6	93°4	95°2	99°4	105°6	109°4
	18	121°0	135°0	137°0	132°9	127°4	120°6	125°4	81°4	94°2	114°4	114°4	117°4
	19	123°2	123°4	126°4	124°5	119°4	119°2	110°0	101°7	103°0	105°6	107°4	111°0
	20	112°8	115°6	121°4	120°2	119°7	114°4	110°0	110°4	110°4	109°5	110°2	111°6
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	123°4	125°1	122°2	120°8	115°4	107°4	106°2	107°3	106°8	108°1	108°8	113°6
	23	122°4	124°8	125°6	126°2	119°8	115°0	112°0	110°0	109°4	108°8	110°6	113°4
	24	125°0	128°2	124°4	113°6	114°4	110°4	101°2	105°4	105°5	100°4	105°4	111°3
	25	120°4	122°7	121°2	122°4	119°4	113°6	111°2	109°5	106°4	105°3	107°0	112°0
	26	125°2	125°4	125°4	121°2	114°2	109°2	105°3	106°0	107°4	108°8	111°4	113°4
	27	129°2	129°0	111°6	115°2	109°9	109°2	107°3	105°3	103°2	106°8	109°4	122°4
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	123°4	123°9	124°0	121°8	117°6	113°2	108°4	108°3	110°4	111°7	113°7	114°2
	30	121°0	124°4	124°4	124°4	119°4	113°6	107°2	101°8	101°8	107°6	109°0	112°4
	31	125°4	129°3	127°5	132°4	120°8	108°8	108°4	105°4	101°6	101°4	106°4	110°4
Hourly Means	122°59	125°41	124°27	122°54	117°10	112°68	108°21	104°54	101°66	107°23	109°71	113°40	
JUNE.	1	124°4	126°6	123°2	121°4	116°5	109°7	107°6	110°0	107°5	107°8	110°4	113°0
	2	124°3	125°4	125°5	122°5	118°4	112°4	106°6	104°4	103°6	106°6	109°2	112°4
	3	126°2	129°0	129°6	126°0	121°0	114°4	106°2	102°9	101°5	103°5	108°8	111°2
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	120°2	126°6	122°0	123°3	121°4	112°5	105°6	102°7	100°2	105°5	110°2	119°2
	6	117°2	122°6	126°6	124°4	121°4	114°4	107°8	105°5	104°7	107°2	110°2	114°2
	7	124°4	124°4	125°2	124°2	119°2	115°3	110°4	109°0	106°4	106°6	110°3	113°6
	8	124°5	125°7	125°7	124°4	116°2	109°4	104°3	105°0	103°4	104°4	107°8	110°6
	9	123°7	124°2	124°8	123°4	118°6	112°6	109°4	109°4	110°7	110°7	112°4	112°4
	10	126°0	125°6	124°4	122°4	116°4	113°6	109°2	106°4	109°2	108°6	109°4	112°4
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	123°0	125°4	125°4	122°2	118°6	112°4	106°0	107°2	107°6	110°5	114°6	116°7
	13	126°4	127°2	127°4	126°5	122°2	115°1	113°2	107°4	108°2	109°6	111°8	114°0
	14	129°4	126°8	128°4	128°4	120°0	113°4	106°0	104°8	103°4	109°0	112°0	117°9
	15	123°6	124°0	122°6	121°8	112°5	107°4	107°0	108°2	111°4	111°5	112°5	116°4
	16	124°8	127°3	125°3	122°2	115°8	110°5	110°4	107°2	106°4	109°2	112°4	115°3
	17	121°8	125°4	125°4	121°6	117°8	111°7	108°4	107°4	106°4	108°3	111°7	114°4
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	124°4	127°4	126°5	121°4	119°4	113°4	109°4	106°4	105°4	103°4	103°8	109°4
	20	115°5	120°2	126°9	124°0	121°4	118°4	110°8	108°0	108°4	106°0	109°6	112°8
	21	124°8	127°5	120°2	121°3	118°5	108°4	107°8	107°4	106°5	109°7	110°2	109°2
	22	117°4	126°1	126°4	125°0	123°0	112°6	114°9	106°2	106°4	111°5	118°9	117°4
	23	121°2	123°4	124°4	123°6	118°8	112°0	107°1	107°2	109°7	113°4	113°0	114°8
	24	122°4	121°9	123°4	123°6	120°4	115°6	111°3	112°0	102°4	107°3	111°4	115°0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	124°5	125°6	124°4	121°4	118°7	114°6	110°8	105°6	103°8	105°6	110°9	115°5
	27	125°4	127°4	129°4	127°6	118°1	111°3	108°4	104°6	103°4	101°6	109°0	113°2
	28	124°6	126°6	126°6	124°8	117°0	109°2	104°2	104°4	103°4	105°8	110°2	114°2
	29	125°2	126°2	126°8	126°2	123°0	115°4	107°8	105°4	100°8	101°4	106°4	111°7
	30	127°4	130°8	129°0	125°4	117°7	112°6	110°3	107°4	107°4	109°4	111°5	113°5
	Hourly Means	123°57	125°74	125°60	123°81	118°92	112°63	108°50	106°62	105°70	107°68	110°68	113°86

lon.		DECLINATION.													
		Angular Value of one Scale Division of the Declinometer = 0'·721. Increasing Numbers denote decreasing Westerly Declination.													
10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Means.	
12° 4	113° 5	114° 4	114° 1	112° 1	121° 0	118° 8	115° 9	116° 0	119° 4	110° 8	111° 6	112° 0	119° 2	115° 34	116° 68
08° 8	111° 8	112° 0	115° 5	119° 4	123° 6	123° 6	123° 6	117° 5	117° 6	117° 6	102° 0	116° 5	125° 4	115° 45	
09° 6	119° 0	117° 0	115° 6	118° 4	140° 0	116° 4	117° 2	115° 8	116° 6	117° 4	118° 2	106° 2	129° 3	117° 08	
09° 4	113° 6	114° 5	113° 2	114° 2	114° 6	115° 2	115° 4	117° 5	117° 0	117° 0	115° 4	116° 4	121° 0	116° 30	
08° 6	112° 8	117° 2	120° 8	114° 4	115° 2	114° 9	113° 2	115° 7	116° 0	116° 4	116° 0	117° 4	121° 3	114° 57	
10° 8	112° 7	115° 1	116° 4	115° 9	117° 5	117° 2	117° 4	—	—	—	—	—	—	118° 79	
12° 4	109° 6	110° 4	110° 8	111° 4	119° 6	118° 3	123° 0	125° 6	123° 6	123° 4	124° 4	116° 4	120° 2	114° 80	
105° 3	108° 8	110° 4	111° 4	112° 6	113° 2	115° 8	115° 5	115° 4	116° 4	120° 4	121° 4	119° 4	123° 3	115° 01	
107° 8	114° 5	115° 5	115° 4	128° 4	120° 8	117° 4	124° 2	118° 6	125° 9	103° 6	115° 2	121° 1	120° 0	114° 65	
111° 5	113° 4	114° 6	114° 4	114° 5	114° 4	114° 7	113° 7	116° 3	116° 0	118° 2	118° 0	120° 8	123° 6	116° 23	
110° 4	112° 7	114° 4	115° 4	115° 4	118° 5	119° 0	118° 0	118° 0	117° 0	117° 2	116° 8	116° 3	120° 6	115° 40	
113° 1	115° 9	116° 0	116° 4	118° 4	115° 4	115° 3	115° 6	—	—	—	—	—	—	116° 13	
112° 9	115° 4	116° 4	115° 5	115° 2	115° 4	116° 4	115° 4	115° 4	116° 6	118° 2	119° 4	120° 4	122° 6	116° 50	
110° 0	115° 6	117° 3	115° 2	113° 4	114° 4	113° 6	114° 4	115° 6	116° 4	117° 6	117° 5	118° 7	123° 4	115° 22	
105° 6	109° 4	111° 0	110° 8	107° 4	116° 5	114° 9	127° 5	123° 4	95° 8	119° 4	116° 5	127° 0	137° 6	115° 19	
114° 4	117° 4	118° 3	96° 4	134° 0	107° 4	114° 4	116° 6	116° 4	118° 6	118° 6	119° 4	119° 4	121° 4	117° 71	
107° 4	111° 0	112° 4	122° 4	117° 3	115° 4	115° 6	116° 2	116° 0	100° 4	114° 4	115° 4	113° 4	115° 5 <sup>a</sup>	114° 55	
110° 2	111° 6	113° 0	112° 6	113° 6	114° 3	113° 5	115° 0	—	—	—	—	—	—	114° 68	
108° 8	113° 6	115° 4	114° 4	114° 4	114° 6	114° 8	114° 8	114° 4	115° 0	115° 2	114° 5	115° 5	115° 0	114° 30	
110° 6	113° 4	115° 2	115° 4	115° 0	115° 4	115° 4	116° 4	115° 5	114° 8	115° 8	116° 0	111° 5	120° 0	116° 00	
105° 4	111° 3	113° 7	126° 1	114° 4	111° 4	117° 7	118° 0	118° 2	115° 4	116° 8	113° 6	115° 0	119° 4	114° 25	
107° 0	112° 0	112° 4	112° 0	113° 4	113° 6	116° 0	114° 0	113° 4	119° 6	116° 4	116° 5	121° 2	124° 4	115° 17	
111° 4	113° 4	114° 4	114° 0	112° 4	112° 7	118° 4	114° 2	115° 2	117° 8	122° 3	128° 4	121° 9	125° 8	116° 27	
109° 4	112° 4	115° 4	113° 4	111° 9	113° 4	111° 7	115° 4	—	—	—	—	—	—	113° 70	
113° 7	114° 2	115° 4	115° 4	119° 4	112° 0	114° 4	115° 4	115° 2	115° 4	113° 8	115° 4	119° 0	120° 0	115° 89	
109° 0	112° 4	114° 9	115° 3	115° 5	117° 6	117° 0	116° 8	118° 4	115° 8	117° 0	109° 0	116° 6	120° 2	115° 38	
106° 4	110° 4	118° 0	117° 0	117° 9	130° 0	123° 4	108° 2	121° 4	120° 7	120° 4	117° 4	117° 6	123° 4	117° 34	
109° 71	113° 40	114° 62	114° 64	115° 94	116° 94	116° 44	116° 70	116° 86	116° 13	116° 61	117° 11	118° 01	122° 23	115° 63	
110° 4	113° 0	117° 0	117° 6	116° 4	115° 5	115° 5	115° 5	115° 5	116° 8	115° 8	114° 8	116° 4	120° 7	115° 65	
109° 2	112° 4	114° 4	115° 4	115° 5	118° 4	117° 5	116° 4	115° 4	118° 3	117° 9	119° 7	118° 4	118° 4	115° 71	
108° 8	111° 2	111° 8	117° 4	118° 2	123° 6	116° 4	110° 3	—	—	—	—	—	—	115° 10	
110° 2	119° 2	119° 4	118° 2	111° 7	114° 0	115° 2	115° 6	114° 4	115° 0	113° 4	113° 2	111° 0	117° 5	114° 80	
110° 2	114° 2	114° 4	117° 4	115° 0	114° 6	114° 5	115° 4	114° 5	115° 2	115° 8	117° 4	118° 4	120° 2	115° 38	
110° 3	113° 6	115° 6	115° 6	115° 4	115° 3	114° 6	114° 5	117° 3	116° 4	116° 4	117° 2	119° 2	122° 2	116° 20	
107° 8	110° 6	113° 3	115° 4	114° 5	113° 7	115° 2	120° 4	117° 2	118° 6	115° 4	116° 5	118° 4	117° 0	114° 87	
112° 4	112° 4	112° 8	113° 4	114° 4	114° 0	114° 8	121° 3	121° 7	121° 0	119° 9	120° 8	123° 4	123° 4	117° 22	
108° 4	112° 4	115° 3	114° 4	113° 5	113° 4	114° 0	114° 8	—	—	—	—	—	—	115° 15	
114° 6	116° 7	116° 8	117° 4	116° 4	115° 4	115° 4	114° 4	115° 6	117° 5	115° 4	115° 6	114° 4	117° 2	115° 90	
111° 8	114° 0	117° 4	117° 8	116° 8	116° 5	116° 4	116° 7	120° 4	126° 0	123° 4	118° 8	120° 4	120° 0	118° 32	
112° 0	115° 9	115° 4	114° 6	116° 2	122° 2	128° 4	117° 4	119° 6	119° 2	116° 4	116° 0	115° 8	119° 2	117° 50	
112° 5	116° 4	118° 4	123° 4	119° 4	117° 4	117° 0	120° 4	121° 0	113° 8	113° 4	112° 6	117° 4	121° 4	116° 44	
112° 4	115° 3	118° 1	118° 0	116° 0	115° 0	116° 4	114° 6	114° 4	115° 4	115° 4	116° 5	117° 2	118° 4	115° 94	
111° 7	114° 4	116° 0	115° 6	115° 4	113° 4	114° 8	115° 0	—	—	—	—	—	—	115° 54	
103° 8	109° 4	111° 4	114° 4	112° 2	113° 4	113° 6	113° 6	113° 4	114° 4	114° 4	109° 8	112° 0	118° 4	117° 2	
109° 6	112° 8	114° 4	113° 5	122° 4	117° 2	114° 4	113° 5	114° 0	114° 4	116° 2	116° 0	118° 4	120° 4	115° 70	
110° 2	109° 2	113° 4	113° 2	111° 4	116° 0	116° 0	117° 4	121° 4	122° 4	126° 5	121° 3	108° 8	127° 4	116° 11	
118° 9	117° 4	118° 4	121° 0	123° 2	122° 4	113° 4	115° 6	119° 7	121° 3	113° 3	112° 4	117° 7	121° 4	117° 73	
113° 0	114° 8	114° 4	116° 6	120° 8	114° 3	116° 4	118° 5	116° 4	113° 2	116° 4	115° 8	112° 8	113° 2	115° 72	
111° 4	115° 0	114° 7	116° 2	117° 5	119° 4	117° 2	119° 9	—	—	—	—	—	—	116° 12	
110° 9	115° 5	119° 7	123° 4	117° 3	114° 0	113° 4	115° 4	114° 4	114° 4	113° 4	113° 4	118° 0	118° 4	115° 78	
109° 0	113° 2	115° 0	116° 0	114° 8	114° 9	115° 0	114° 2	114° 4	113° 8	114° 6	115° 8	117° 4	120° 4	115° 36	
110° 2	114° 2	114° 5	115° 0	119° 4	119° 4	116° 2	114° 4	115° 0	110° 4	117° 8	117° 3	119° 7	122° 0	115° 50	
106° 4	111° 7	115° 6	118° 5	117° 4	115° 6	117° 0	118° 3	119° 6	119° 1	121° 2	118° 4	120° 2	120° 0	116° 56	
111° 5	113° 5	116° 2	115° 4	113° 6	113° 4	115° 4	115° 0	117° 0	116° 8	116° 8	112° 4	113° 0	119° 3	116° 11	
110° 68	113° 86	115° 54	116° 72	116° 45	116° 25	115° 96	116° 14	116° 72	116° 58	116° 12	115° 86	117° 19	119° 78	115° 94	

<sup>a</sup> Eight minutes late.

HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
JANUARY.	1	629'2	624'0	622'5	620'0	619'0	612'4	614'6	612'7	614'4	620'2	619'4	621'6
	2	617'0	618'0	614'0	613'2	609'3	602'6	601'6	608'7	612'6	615'0	613'4	612'3
	3	614'8	616'0	614'2	608'5	611'4	606'2	603'2	604'0	607'3	613'2	625'4	614'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	620'0	619'8	620'2	617'0	599'6	605'6	605'1	607'2	614'8	620'0	622'5	611'5
	6	614'1	615'9	615'7	615'0	604'5	597'9	603'0	608'0	611'0	617'7	617'5	618'2
	7	616'0	615'1	610'0	610'0	606'5	603'5	578'0	592'4	606'0	611'3	614'0	611'0
	8	603'0	594'5	602'0	612'6	602'2	592'4	591'0	596'8	600'4	607'5	605'2	610'8
	9	609'4	610'7	607'4	600'0	600'0	596'8	598'7	602'7	604'0	608'0	608'0	611'2
	10	614'4	614'0	614'2	612'0	608'0	602'0	608'2	610'0	612'0	608'0	610'7	612'0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	624'2	623'8	611'2	622'0	615'0	606'0	602'0	608'0	603'0	610'5	618'5	618'2
	13	621'0	623'5	626'0	625'4	622'2	615'0	613'9	614'9	617'3	620'0	620'9	619'2
	14	609'2	611'6	622'6	618'7	608'1	605'3	604'6	607'8	599'3	601'5	608'5	609'2
	15	621'8	616'6	618'5	623'9	615'6	611'2	612'8	615'0	611'8	609'0	613'9	611'0
	16	602'0	609'0	605'8	599'5	603'0	601'5	600'0	605'0	602'5	592'0	608'5	606'8
	17	614'5	612'5	615'0	612'5	605'2	610'9	607'7	601'5	603'9	608'2	611'9	606'2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	630'0	630'0	627'8	626'0	626'0	627'5	623'0	620'4	624'5	627'0	628'2	629'0
	20	627'5	629'0	627'0	624'5	616'1	614'6	616'2	619'9	624'7	625'0	628'8	628'9
	21	621'4	621'7	623'1	618'1	613'1	611'4	608'0	612'0	621'0	625'0	621'3	622'0
	22	624'0	624'3	624'0	618'5	613'1	608'2	608'4	616'0	624'8	631'5	639'0	637'0
	23	631'5	631'1	628'1	619'2	610'8	607'0	610'0	616'0	626'0	632'0	640'0	632'2
	24	607'0	618'0	619'0	620'0	606'0	599'5	603'5	589'8	594'7	600'9	608'9	607'6
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	611'0	610'0	608'0	603'2	593'7	590'7	594'8	600'8	606'5	612'0	610'0	606'0
	27	610'0	610'8	608'0	602'1	596'2	595'0	597'4	606'2	609'2	615'3	611'0	613'0
	28	610'3	612'8	613'4	597'3	605'0	597'0	597'0	601'3	606'2	615'0	614'8	617'0
	29	605'0	605'6	604'2	600'8	596'6	594'1	597'1	603'5	609'0	612'0	616'0	612'4
	30	606'0	605'0	601'0	596'0	590'5	590'0	593'2	594'0	593'6	612'0	596'0	603'8
	31	604'0	605'0	606'5	605'1	600'0	597'0	594'0	605'4	611'0	615'8	619'6	618'0
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	615'53	615'86	615'17	613'01	607'25	603'75	603'44	606'44	610'06	613'79	616'87	615'53	613'91
TEMPERATURE OF THE BIFLAR MAGNET.													
JANUARY.	1	41'4	41'5	41'5	41'5	41'7	41'5	41'5	41'7	42'0	42'6	42'8	
	2	46'7	46'7	46'4	46'6	46'8	47'0	47'0	47'0	47'0	46'8	47'3	
	3	46'6	46'5	46'5	46'2	46'3	47'0	47'2	48'0	48'0	48'3	49'0	
	4	—	—	—	—	—	—	—	—	—	—	—	
	5	43'0	42'8	42'6	42'6	43'0	43'8	44'8	45'2	46'2	46'5	46'4	
	6	45'0	45'5	45'6	45'4	46'2	47'2	47'4	48'0	48'0	48'0	47'7	
	7	47'5	47'8	47'4	47'5	47'8	48'5	49'0	48'8	49'0	49'4	49'5	
	8	51'5	51'0	50'4	49'7	49'5	50'0	50'0	49'8	49'4	49'2	49'0	
	9	48'7	48'6	48'0	47'8	47'8	48'0	48'2	48'5	48'7	49'2	49'0	
	10	47'6	47'4	46'8	46'4	46'2	46'9	47'0	47'0	47'5	47'5	47'0	
	11	—	—	—	—	—	—	—	—	—	—	—	
	12	41'5	41'8	41'8	41'2	41'0	41'8	42'5	43'0	43'2	43'5	43'6	
	13	39'6	39'9	39'5	39'2	39'4	40'2	40'8	41'8	42'6	43'2	43'0	
	14	41'6	41'7	41'6	42'2	42'5	43'3	44'2	45'1	46'7	48'0	48'5	
	15	44'7	44'8	44'7	45'0	46'6	47'6	48'4	48'9	49'4	50'5	51'0	
	16	51'2	50'5	49'7	49'0	49'0	49'0	48'7	48'4	48'5	47'9	47'5	
	17	41'5	41'0	40'0	39'4	39'3	39'2	39'0	38'8	38'2	38'0	37'2	
	18	—	—	—	—	—	—	—	—	—	—	—	
	19	32'2	33'0	32'9	33'0	34'1	35'0	35'6	36'6	37'0	37'6	39'3	
	20	35'5	35'5	35'0	36'0	36'4	37'0	37'4	38'2	39'0	39'8	40'6	
	21	42'2	41'7	41'0	41'0	40'7	41'0	41'4	41'7	42'3	43'6	43'8	
	22	37'0	37'1	36'6	37'5	38'0	37'5	37'0	37'2	37'6	38'7	39'5	
	23	36'1	36'2	36'1	36'2	37'5	39'4	40'5	41'0	41'5	42'1	43'4	
	24	42'0	41'5	41'5	41'5	42'0	43'0	43'5	43'8	44'0	44'6	44'0	
	25	—	—	—	—	—	—	—	—	—	—	—	
	26	47'0	47'0	47'0	47'0	47'2	47'8	48'4	49'0	49'0	49'8	50'2	
	27	47'2	46'0	45'0	44'6	45'0	45'4	45'8	46'5	46'7	47'5	47'4	
	28	44'8	45'2	45'2	44'8	45'6	46'5	47'8	48'4	48'5	48'8	49'1	
	29	48'8	48'8	49'0	49'4	49'5	50'2	50'5	51'0	51'0	51'0	50'6	
	30	52'2	52'4	52'0	51'8	52'0	52'5	52'7	53'0	53'0	53'0	53'4	
	31	47'0	45'5	44'7	43'8	43'3	43'0	42'8	43'0	43'3	44'3	44'8	
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	44'08	43'98	43'65	43'57	43'86	44'43	44'79	45'17	45'44	45'91	46'18	46'13	

12h.
623'3
611'7
607'7
619'0
615'8
611'5
610'0
613'8
612'4
617'0
612'4
609'0
612'0
610'8
620'5
628'2
624'3
622'0
632'9
590'0
607'2
605'9
614'0
614'0
610'2
606'8
614'0
613'91
43'2
47'7
49'0
47'5
47'5
49'4
48'5
49'2
46'0
43'2
43'0
48'0
51'2
47'2
37'2
39'2
41'0
44'2
39'5
43'5
44'0
50'0
47'0
49'3
50'2
53'6
45'0
46'09

**HORIZONTAL FORCE.**

One Scale Division = '000087 parts of the II. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.

		12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
63.	11h.													
63.	12h.													
63.	13h.													
63.	14h.													
63.	15h.													
63.	16h.													
63.	17h.													
63.	18h.													
63.	19h.													
63.	20h.													
63.	21h.													
63.	22h.													
63.	23h.													
63.	24h.													
63.	25h.													
63.	26h.													
63.	27h.													
63.	28h.													
63.	29h.													
63.	30h.													
63.	31h.													
63.	32h.													
63.	33h.													
63.	34h.													
63.	35h.													
63.	36h.													
63.	37h.													
63.	38h.													
63.	39h.													
63.	40h.													
63.	41h.													
63.	42h.													
63.	43h.													
63.	44h.													
63.	45h.													
63.	46h.													
63.	47h.													
63.	48h.													
63.	49h.													
63.	50h.													
63.	51h.													
63.	52h.													
63.	53h.													
63.	54h.													
63.	55h.													
63.	56h.													
63.	57h.													
63.	58h.													
63.	59h.													
63.	60h.													
63.	61h.													
63.	62h.													
63.	63h.													
63.	64h.													
63.	65h.													
63.	66h.													
63.	67h.													
63.	68h.													
63.	69h.													
63.	70h.													
63.	71h.													
63.	72h.													
63.	73h.													
63.	74h.													
63.	75h.													
63.	76h.													
63.	77h.													
63.	78h.													
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63.	80h.													
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63.	83h.													
63.	84h.													
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63.	87h.													
63.	88h.													
63.	89h.													
63.	90h.													
63.	91h.													
63.	92h.													
63.	93h.													
63.	94h.													
63.	95h.													
63.	96h.													
63.	97h.													
63.	98h.													
63.	99h.													
63.	100h.													

**TEMPERATURE OF THE BIFILAR MAGNET.**

42'6	42'8	43'2	43'0	43'0	43'0	42'8	43'3	43'0	44'2	41'6	45'7	46'4	42'80
46'8	47'3	47'7	49'0	48'0	48'4	49'0	48'7	47'4	47'0	46'5	46'2	46'5	47'28
48'6	49'0	49'0	49'0	49'0	48'3	48'4	48'5	41'5	41'5	41'7	42'0	42'2	43'0
46'4	47'0	47'5	47'5	47'2	47'0	46'8	46'8	46'5	46'2	45'4	45'0	45'0	45'41
48'0	47'7	47'5	47'0	46'5	46'5	46'5	46'2	46'2	46'2	46'6	47'2	47'4	46'79
49'2	49'5	49'4	49'8	50'2	50'5	50'7	51'0	50'8	51'0	51'5	52'0	51'5	49'60
49'0	48'4	48'5	48'8	48'8	49'0	49'0	48'9	49'0	49'0	49'5	49'5	49'5	49'43
49'2	49'0	49'2	48'8	48'5	48'1	48'1	48'4	48'5	48'2	48'2	48'4	48'3	47'9
47'0	46'6	46'0	45'8	45'6	45'6	45'4	45'2	40'2	40'2	40'4	40'5	41'0	45'03
43'6	43'2	43'2	43'2	42'6	42'0	42'0	41'6	41'5	41'2	41'4	41'4	40'8	42'01
43'0	42'6	43'0	42'7	42'8	42'0	41'6	41'9	42'0	42'0	42'2	42'6	42'0	41'58
48'6	48'5	48'0	47'4	47'4	47'6	47'7	47'5	47'0	46'6	46'2	46'0	46'0	45'68
51'0	51'2	51'2	51'2	51'2	51'2	51'2	51'0	50'8	51'2	51'5	51'5	51'2	49'46
47'9	47'5	47'2	46'8	46'4	45'5	45'2	44'7	44'6	44'2	43'8	43'6	42'6	46'87
38'0	37'2	37'2	37'0	36'4	36'2	36'0	36'0	30'4	30'6	31'2	31'6	31'7	31'2
39'3	40'0	39'2	38'0	37'4	36'9	36'1	36'2	36'0	35'2	35'4	35'4	35'7	35'97
40'6	40'7	41'0	41'7	42'2	42'8	42'5	43'0	43'0	42'2	42'5	42'5	42'5	39'98
43'8	43'9	44'2	45'0	45'0	44'5	43'5	42'0	41'6	41'3	39'6	38'4	38'0	41'85
39'5	40'3	39'5	39'3	38'6	38'2	38'0	37'6	37'2	36'3	35'8	35'5	35'3	37'51
43'4	43'4	43'5	43'0	42'7	41'8	41'4	41'0	40'8	40'4	40'7	41'0	41'2	40'52
45'2	44'0	44'0	44'0	44'8	45'3	45'5	45'7	45'7	45'5	45'9	46'3	46'3	44'32
50'2	50'0	50'0	49'8	49'5	49'2	49'4	50'0	50'0	49'0	48'8	48'5	48'0	48'71
47'6	47'4	47'0	46'5	46'4	45'6	46'0	46'2	45'8	45'4	45'4	45'4	45'0	46'02
49'1	49'0	49'3	49'5	49'5	49'3	49'3	49'2	49'0	48'8	48'8	48'5	49'0	48'01
51'0	50'6	50'2	50'0	50'0	50'4	50'8	50'8	51'2	51'5	51'9	51'8	52'1	50'56
53'4	53'4	53'6	53'6	53'6	53'8	53'9	53'2	52'7	52'0	51'5	51'0	50'0	52'43
44'8	45'2	45'0	44'7	44'4	44'5	44'4	44'0	32'0	32'5	33'5	34'0	34'5	41'64
46'18	46'13	46'09	45'97	45'83	45'67	45'61	45'49	44'30	44'05	44'08	44'06	44'07	43'87



HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
FEBRUARY.	2	630'2	627'0	628'8	618'4	610'6	607'2	608'8	608'2	614'2	619'0	620'2	618'8
	3	617'4	618'8	615'0	610'0	595'4	595'0	596'0	596'2	600'0	605'0	610'0	610'0
	4	612'7	615'0	611'7	603'0	595'0	593'0	590'9	586'0	594'0	604'0	606'5	610'0
	5	611'5	611'0	608'7	605'2	600'5	594'0	591'5	596'0	600'0	601'4	602'0	604'8
	6	608'0	607'0	607'0	605'4	601'0	597'0	600'0	600'6	603'4	603'4	601'4	603'6
	7	610'0	604'6	607'2	604'0	593'6	591'8	594'2	599'6	604'4	602'6	607'2	605'6
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	627'4	630'5	611'6	555'0	628'0	621'6	618'8	621'0	623'0	622'0	621'0	622'0
	10	628'0	623'0	631'4	633'0	631'5	627'4	624'2	630'0	635'5	630'5	627'0	627'8
	11	620'4	618'0	619'0	612'0	610'0	614'0	613'0	617'0	614'2	623'0	623'0	619'0
	12	624'0	621'0	619'0	616'2	612'4	609'2	609'2	614'6	608'2	622'2	613'2	615'0
	13	619'8	619'7	614'0	608'2	608'0	606'0	606'5	610'8	614'8	615'6	616'0	614'0
	14	604'6	602'4	608'8	607'2	608'0	603'2	606'6	610'6	609'0	627'0	611'8	617'5
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	612'0	619'2	607'3	613'5	608'0	604'4	608'4	597'2	605'4	612'2	606'0	598'0
	17	617'0	618'0	609'0	605'0	611'0	608'2	600'5	605'2	610'0	594'0	604'8	605'4
	18	614'0	616'0	607'0	604'0	607'0	605'0	596'0	599'8	596'2	602'2	601'5	606'0
	19	615'0	614'2	614'0	616'8	617'7	616'8	618'8	617'4	616'0	610'2	611'6	611'0
	20	619'2	620'4	620'0	618'4	616'0	616'0	614'0	614'2	617'0	618'8	615'4	612'0
	21	612'0	610'8	608'0	606'0	609'2	612'2	612'5	610'0	609'5	605'0	610'0	610'4
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	626'0	626'0	625'0	621'0	618'0	615'0	615'2	615'0	617'2	618'4	620'8	619'4
	24	622'5	621'0	620'0	619'4	622'0	624'2	621'2	620'4	622'0	622'4	620'8	618'4
	25	623'0	619'4	618'4	619'2	618'0	617'2	618'6	619'0	624'0	628'2	609'0	614'0
	26	622'8	621'4	620'5	614'0	610'4	613'6	603'4	620'0	615'0	629'0	617'0	605'0
	27	627'6	627'8	625'5	621'4	618'5	614'5	613'0	616'0	611'0	620'0	622'0	623'2
	28	622'1	620'0	616'6	613'2	608'1	604'8	606'3	610'0	613'8	618'0	617'0	620'4
March 1	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	618'63	618'01	615'56	610'40	610'75	608'80	608'28	609'78	611'58	614'75	613'26	612'97	612'56

TEMPERATURE OF THE BIFLAR MAGNET.													
	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
FEBRUARY.	2	35'6	35'4	34'8	35'0	36'0	36'2	37'2	38'7	39'2	39'7	40'4	40'5
	3	43'5	43'6	43'8	41'0	44'3	45'0	45'6	46'0	46'8	47'8	48'7	48'5
	4	46'0	46'2	46'8	47'2	48'6	49'1	49'6	48'5	48'5	49'0	49'0	48'2
	5	49'0	48'8	49'0	50'1	51'0	51'4	51'0	50'8	51'4	52'0	52'0	51'4
	6	49'2	48'9	48'5	48'5	49'0	50'0	50'0	50'6	51'2	51'6	52'0	51'7
	7	49'2	48'6	47'4	48'2	49'2	50'2	50'4	50'5	50'1	50'0	50'0	49'7
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	32'8	33'0	33'0	33'7	34'5	34'6	34'6	34'6	35'0	35'6	36'0	36'4
	10	35'3	33'0	33'0	33'0	34'0	34'3	35'0	36'0	37'3	38'0	38'4	38'3
	11	42'3	42'5	42'0	41'9	41'9	43'2	43'5	43'8	44'0	44'0	44'0	44'2
	12	39'4	38'7	38'9	39'0	40'5	40'7	41'3	41'8	42'2	42'4	42'8	43'0
	13	43'8	44'0	43'8	43'6	43'6	44'6	45'5	46'2	47'1	47'8	48'0	48'6
	14	45'4	44'6	44'0	43'2	43'4	44'2	45'0	45'8	46'8	47'5	47'8	47'0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	43'0	43'2	43'0	43'2	44'0	44'5	44'6	44'7	44'6	44'8	45'0	44'6
	17	41'0	41'0	43'5	44'0	44'5	46'0	47'0	47'0	47'4	47'7	48'0	47'4
	18	44'5	44'0	43'9	44'5	45'5	46'6	46'8	47'4	47'8	48'4	48'5	48'2
	19	42'0	41'8	41'0	40'6	41'2	42'0	43'0	43'5	43'7	43'7	43'4	43'0
	20	42'0	42'0	41'6	41'7	42'0	43'0	43'5	44'0	44'8	45'5	46'4	46'5
	21	46'7	46'5	46'4	46'4	46'6	48'0	48'6	49'2	49'4	49'0	47'8	47'0
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	37'4	37'4	37'2	38'8	39'5	40'4	40'5	40'6	40'7	41'0	41'6	41'5
	24	39'4	38'6	38'8	38'8	38'8	39'6	40'8	41'6	42'6	42'8	42'5	42'5
	25	40'0	39'2	38'4	38'0	38'6	39'4	40'4	40'8	41'0	41'4	42'0	41'5
	26	36'2	34'8	34'9	35'1	35'8	36'7	37'2	37'2	37'5	38'4	37'8	37'0
	27	30'0	29'0	29'7	30'5	31'2	33'4	35'0	37'0	38'0	38'7	38'8	38'2
	28	39'0	39'0	38'0	37'8	38'0	39'0	40'0	40'4	40'8	41'0	41'4	42'0
March 1	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41'40	41'12	40'89	41'12	41'74	42'59	43'15	43'61	44'01	44'45	44'69	44'48	44'02

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H.F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

63.		12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
h.	11h.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	618'8	622'0	622'0	618'0	615'0	620'0	620'0	618'5	619'2	618'4	618'0	616'2	621'4	618'34
0	610'0	614'5	614'0	614'0	607'6	607'2	609'0	611'2	611'2	611'0	614'2	613'2	613'7	608'73
5	610'0	609'2	608'7	609'4	607'8	609'2	609'2	609'2	610'8	610'7	611'0	612'2	612'2	605'89
0	604'8	606'2	607'0	606'5	607'3	607'2	607'4	607'0	608'0	607'5	608'0	607'0	608'0	604'86
4	603'6	604'0	605'0	599'2	603'0	601'0	605'0	601'0	599'0	601'0	598'0	602'0	606'0	602'83
2	605'6	607'0	606'0	606'0	606'0	608'0	608'5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	608'0	607'4	605'0	602'0	604'4	623'6	—	604'86
0	622'0	622'0	624'0	626'0	613'4	614'2	614'0	620'2	623'0	623'2	621'8	624'4	625'8	619'04
0	627'8	622'2	621'0	617'2	620'0	618'6	619'6	622'0	621'6	617'2	618'2	619'4	620'0	624'43
0	619'0	617'4	617'8	616'4	620'0	620'4	619'6	618'2	620'0	620'0	618'4	621'2	618'0	617'92
2	615'0	614'0	613'7	610'0	617'0	619'0	619'0	617'0	617'0	617'0	617'0	617'0	617'0	615'79
8	614'0	607'5	603'0	598'0	612'0	603'0	607'0	607'0	606'5	606'0	606'8	605'0	602'2	609'06
0	617'5	602'0	611'0	617'0	607'6	607'2	610'0	—	—	—	—	—	—	—
—	—	591'2	610'2	606'2	610'0	611'5	613'4	615'0	615'0	618'0	613'2	609'8	611'0	608'96
0	598'0	609'2	613'8	611'9	609'0	612'2	612'0	611'0	614'0	612'2	613'0	613'0	611'0	609'85
5	605'4	607'0	609'0	608'0	607'0	609'0	610'0	608'5	610'0	612'0	612'0	610'5	613'0	607'20
8	606'0	613'0	614'0	615'0	618'0	618'0	618'5	617'5	617'8	619'4	618'0	619'2	618'6	616'23
4	612'0	613'0	609'0	616'0	608'0	608'0	610'0	609'2	606'4	606'6	608'8	610'0	607'2	613'07
0	610'4	610'0	610'0	612'0	610'2	611'4	610'0	—	—	—	—	—	—	—
—	—	621'0	623'2	622'8	622'0	621'8	622'7	622'8	623'0	623'0	623'0	622'4	622'0	613'03
8	610'4	618'2	618'0	618'1	618'0	620'0	621'0	621'0	621'0	621'0	621'0	621'0	621'4	621'11
8	618'4	608'0	604'0	602'0	611'0	612'0	616'0	615'0	612'0	612'7	618'0	618'7	619'6	620'58
0	614'0	617'0	617'0	608'0	601'7	611'0	620'0	622'0	620'8	624'0	621'2	622'0	626'5	615'71
0	605'0	623'0	623'4	624'2	625'4	619'8	619'6	618'4	622'4	622'1	621'0	621'3	622'0	617'18
0	623'2	619'8	620'6	620'0	622'0	621'0	622'7	—	—	—	—	—	—	621'05
0	620'4	—	—	—	—	—	—	625'7	627'0	628'0	631'2	627'0	628'0	619'30
—	—	612'56	613'56	612'58	612'67	613'07	614'34	614'88	615'15	615'32	615'57	615'59	616'68	613'53

TEMPERATURE OF THE BIFILAR MAGNET.

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0'4	40'5	40'5	41'0	41'2	41'4	41'5	42'0	42'4	42'5	42'8	43'0	43'2	43'5	39'74
8'7	48'5	48'4	48'5	48'5	48'0	47'8	47'8	47'4	47'4	47'2	47'0	46'6	45'7	46'38
0'0	48'2	47'8	47'8	47'8	47'6	47'8	47'8	47'4	47'0	47'0	47'2	47'2	47'7	47'76
2'0	51'4	50'6	50'4	50'4	50'3	50'7	51'0	51'0	51'2	51'0	51'0	50'5	49'6	50'65
2'0	51'7	51'0	51'1	51'0	50'5	50'5	50'2	50'4	50'5	50'0	49'6	49'5	49'0	50'19
0'0	49'7	49'8	49'5	49'0	47'8	46'5	45'5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	33'7	31'0	31'8	35'0	35'6	32'8	45'31
6'0	36'4	35'5	35'5	35'5	35'4	35'1	35'0	34'5	34'0	34'2	33'8	33'8	33'3	34'56
4'4	38'3	38'2	38'6	38'8	38'2	38'5	38'6	39'4	39'9	41'0	41'7	42'0	42'5	37'54
1'0	41'2	43'6	42'8	41'8	41'2	41'2	41'5	41'7	41'5	41'2	41'2	41'4	40'0	42'35
2'8	43'0	42'6	42'6	42'0	41'8	42'0	42'0	42'4	42'9	43'0	43'4	43'8	43'9	41'80
8'0	48'6	48'2	48'6	48'4	47'5	47'4	47'8	48'4	47'6	47'7	47'2	46'7	45'6	46'57
7'8	47'0	47'0	46'9	46'1	45'8	45'2	45'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	40'2	40'6	40'8	41'8	42'2	42'7	44'54
5'0	41'6	44'4	44'5	44'0	43'8	43'6	43'6	43'4	43'2	43'6	43'9	44'0	44'0	43'97
8'0	47'4	47'0	46'4	46'2	45'6	45'5	45'5	45'2	45'0	45'0	45'2	45'6	45'0	45'76
8'5	48'2	47'9	48'0	47'8	47'0	47'0	47'0	46'6	45'0	44'2	43'5	42'5	42'0	46'03
3'4	43'0	41'8	42'0	41'6	41'5	41'5	41'5	42'0	42'0	42'4	42'5	42'4	41'8	42'16
6'4	46'5	47'0	48'0	48'0	47'2	47'0	47'3	47'5	47'4	47'6	47'6	47'4	47'0	45'50
7'8	47'5	47'0	47'3	47'0	46'6	46'4	46'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	38'0	37'6	38'9	39'4	38'0	37'8	45'00
1'6	41'5	41'0	40'8	40'8	41'0	40'7	40'6	40'4	40'0	39'9	39'5	39'4	39'0	39'99
2'8	42'5	41'7	41'4	41'6	41'4	41'0	40'6	40'6	40'4	40'0	39'5	39'5	39'3	40'59
2'0	41'5	40'4	40'8	39'8	39'4	40'0	40'0	39'8	39'6	39'4	38'4	38'0	37'0	39'72
7'8	37'0	36'0	36'0	35'5	35'0	34'6	33'5	33'0	32'4	31'8	31'2	31'2	30'5	34'97
8'8	38'2	37'8	38'8	40'0	40'2	40'0	40'1	39'8	38'9	39'2	39'5	39'5	39'5	36'81
1'4	42'0	41'2	41'4	41'4	41'7	41'4	41'1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	34'2	33'7	33'6	33'4	33'4	33'4	38'60
4'69	44'48	44'02	44'11	43'93	43'58	43'45	43'38	42'08	41'89	41'92	41'88	41'81	41'36	42'78

HORIZONTAL FORCE.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1°.63.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
MARCH.	2	629.0	626.5	624.0	617.6	613.0	605.4	611.2	613.6	615.6	619.2	624.8	619.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	3	621.6	620.4	615.8	612.0	607.6	602.2	602.8	601.8	606.6	609.0	614.2	612.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	4	617.8	616.2	613.4	613.3	606.1	597.0	601.8	601.4	608.5	600.2	605.0	610.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	5	609.0	606.4	606.0	605.0	608.5	606.0	600.2	598.8	599.2	604.0	601.0	605.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	6	609.5	607.4	605.4	603.0	597.0	594.0	594.5	595.0	600.2	601.2	607.5	607.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	7	615.0	614.5	611.0	607.4	601.4	601.4	601.4	599.2	601.6	606.4	607.9	609.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	8	—	—	—	—	—	—	—	—	—	—	—	—																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	9	614.0	618.4	607.0	605.4	603.2	595.8	592.2	593.8	599.0	602.8	606.0	607.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	10	610.0	608.2	604.8	600.0	594.3	590.4	587.3	588.0	595.1	599.7	605.0	606.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	11	610.0	610.2	608.2	608.5	602.5	595.6	594.4	598.9	605.0	595.5	600.0	606.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	12	607.0	607.0	597.9	595.0	591.5	587.5	584.5	588.8	591.2	594.6	603.7	596.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	13	607.5	589.0	593.0	589.8	575.5	577.7	564.6	586.2	582.8	591.0	585.4	587.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	14	594.0	584.8	584.6	565.5	569.2	564.7	562.5	571.2	582.5	592.2	599.5	599.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	15	—	—	—	—	—	—	—	—	—	—	—	—																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	16	607.2	603.5	596.4	596.2	595.4	590.0	584.4	584.4	594.4	603.0	601.8	602.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	17	591.4	574.6	592.0	589.4	593.9	580.0	583.5	587.5	590.2	614.0	605.6	612.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	18	590.0	607.9	601.0	595.5	591.7	588.5	587.6	591.0	598.6	605.0	600.9	607.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	19	600.0	598.0	592.8	585.0	583.4	581.8	578.0	578.5	583.4	589.8	590.3	595.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	20	598.0	600.6	598.0	593.2	582.0	573.4	570.6	574.0	581.0	590.0	589.8	585.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	21	598.6	595.8	593.7	590.2	585.0	581.1	583.4	591.0	592.0	592.2	597.9	604.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	22	—	—	—	—	—	—	—	—	—	—	—	—																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	23	610.0	607.2	602.2	595.6	589.5	584.8	585.0	590.8	593.0	598.0	602.0	603.2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	24	607.4	608.0	599.0	589.0	584.0	586.5	588.0	587.8	602.0	607.7	606.0	608.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	25	610.5	611.0	607.0	601.2	594.8	589.9	591.2	593.1	598.1	608.9	608.7	607.1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	26	599.9	606.1	607.9	596.9	595.9	596.9	593.1	595.2	594.7	602.5	590.1	598.7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	27	602.4	600.5	595.9	586.4	576.4	580.9	584.9	574.7	591.3	596.5	602.1	598.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	28	603.7	599.9	592.9	591.2	589.4	583.7	585.9	583.9	586.7	592.4	601.9	605.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	29	—	—	—	—	—	—	—	—	—	—	—	—																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	30	616.7	611.4	607.4	595.9	577.9	584.9	578.9	582.1	588.9	596.2	607.9	614.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	31	610.9	608.9	607.0	599.2	594.0	588.1	589.0	591.5	600.7	604.1	614.2	604.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Hourly Means	607.35	605.48	602.59	597.21	592.54	588.78	587.81	590.24	595.47	600.62	603.16	604.30	603.32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
TEMPERATURE OF THE REGULAR MAGNET.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Hourly Means																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
MARCH.	31.0	31.4	35.1	37.5	39.0	40.6	41.5	42.2	42.4	43.0	43.4	43.1	43.1	43.1	43.7	44.3	44.5	43.6	43.4	43.0	42.2	41.7	41.0	40.6	40.4	40.3	40.2	40.1	40.0	39.9	39.8	39.7	39.6	39.5	39.4	39.3	39.2	39.1	39.0	38.9	38.8	38.7	38.6	38.5	38.4	38.3	38.2	38.1	38.0	37.9	37.8	37.7	37.6	37.5	37.4	37.3	37.2	37.1	37.0	36.9	36.8	36.7	36.6	36.5	36.4	36.3	36.2	36.1	36.0	35.9	35.8	35.7	35.6	35.5	35.4	35.3	35.2	35.1	35.0	34.9	34.8	34.7	34.6	34.5	34.4	34.3	34.2	34.1	34.0	33.9	33.8	33.7	33.6	33.5	33.4	33.3	33.2	33.1	33.0	32.9	32.8	32.7	32.6	32.5	32.4	32.3	32.2	32.1	32.0	31.9	31.8	31.7	31.6	31.5	31.4	31.3	31.2	31.1	31.0	30.9	30.8	30.7	30.6	30.5	30.4	30.3	30.2	30.1	30.0	29.9	29.8	29.7	29.6	29.5	29.4	29.3	29.2	29.1	29.0	28.9	28.8	28.7	28.6	28.5	28.4	28.3	28.2	28.1	28.0	27.9	27.8	27.7	27.6	27.5	27.4	27.3	27.2	27.1	27.0	26.9	26.8	26.7	26.6	26.5	26.4	26.3	26.2	26.1	26.0	25.9	25.8	25.7	25.6	25.5	25.4	25.3	25.2	25.1	25.0	24.9	24.8	24.7	24.6	24.5	24.4	24.3	24.2	24.1	24.0	23.9	23.8	23.7	23.6	23.5	23.4	23.3	23.2	23.1	23.0	22.9	22.8	22.7	22.6	22.5	22.4	22.3	22.2	22.1	22.0	21.9	21.8	21.7	21.6	21.5	21.4	21.3	21.2	21.1	21.0	20.9	20.8	20.7	20.6	20.5	20.4	20.3	20.2	20.1	20.0	19.9	19.8	19.7	19.6	19.5	19.4	19.3	19.2	19.1	19.0	18.9	18.8	18.7	18.6	18.5	18.4	18.3	18.2	18.1	18.0	17.9	17.8	17.7	17.6	17.5	17.4	17.3	17.2	17.1	17.0	16.9	16.8	16.7	16.6	16.5	16.4	16.3	16.2	16.1	16.0	15.9	15.8	15.7	15.6	15.5	15.4	15.3	15.2	15.1	15.0	14.9	14.8	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.0	13.9	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1	13.0	12.9	12.8	12.7	12.6	12.5	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.7	11.6	11.5	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.7	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.8	9.7	9.6	9.5	9.4	9.3	9.2	9.1	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9	-1.0	-1.1	-1.2	-1.3	-1.4	-1.5	-1.6	-1.7	-1.8	-1.9	-2.0	-2.1	-2.2	-2.3	-2.4	-2.5	-2.6	-2.7	-2.8	-2.9	-3.0	-3.1	-3.2	-3.3	-3.4	-3.5	-3.6	-3.7	-3.8	-3.9	-4.0	-4.1	-4.2	-4.3	-4.4	-4.5	-4.6	-4.7	-4.8	-4.9	-5.0	-5.1	-5.2	-5.3	-5.4	-5.5	-5.6	-5.7	-5.8	-5.9	-6.0	-6.1	-6.2	-6.3	-6.4	-6.5	-6.6	-6.7	-6.8	-6.9	-7.0	-7.1	-7.2	-7.3	-7.4	-7.5	-7.6	-7.7	-7.8	-7.9	-8.0	-8.1	-8.2	-8.3	-8.4	-8.5	-8.6	-8.7	-8.8	-8.9	-9.0	-9.1	-9.2	-9.3	-9.4	-9.5	-9.6	-9.7	-9.8	-9.9	-10.0

HORIZONTAL FORCE.  
One Scale Division = 0.00087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1.63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
619.2	622.0	621.6	620.0	619.4	619.0	620.0	620.0	620.0	621.0	621.5	621.0	619.32
617.0	617.0	616.0	613.0	613.0	612.0	616.0	612.4	612.0	618.0	616.0	615.6	612.79
611.0	612.5	611.5	610.0	607.8	600.0	602.0	601.8	605.4	603.2	603.0	610.0	607.16
605.2	601.0	601.0	603.4	598.2	601.8	601.0	605.2	601.0	602.2	608.0	608.0	604.17
607.8	610.0	608.2	609.2	609.3	607.8	607.2	607.7	612.5	612.4	613.5	614.3	605.90
616.0	615.0	615.0	615.2	614.0	614.2	—	—	—	—	—	—	610.35
608.0	608.0	608.0	609.0	609.0	607.0	613.0	613.0	614.8	613.0	613.8	611.3	603.87
606.5	606.0	604.0	605.0	601.7	605.0	607.0	606.2	607.4	609.2	610.0	—	602.73
607.2	604.0	593.0	596.4	596.2	597.4	609.0	603.0	602.2	600.2	601.2	603.8	602.23
591.0	591.8	591.4	597.0	597.6	600.1	604.0	600.9	601.2	600.0	606.0	610.0	598.05
582.0	582.4	588.2	580.0	580.5	583.0	580.0	569.0	571.5	586.0	577.0	591.8	583.93
581.0	585.5	579.5	587.0	587.0	—	—	—	—	—	—	—	588.23
599.9	592.0	597.0	597.0	595.2	620.4	594.8	601.2	599.0	599.2	601.0	597.0	597.77
607.2	601.0	608.0	600.0	595.6	601.4	597.8	598.7	594.2	561.1	576.4	601.0	594.28
600.8	595.0	602.8	603.4	603.5	601.8	602.0	600.0	600.0	600.0	600.0	601.0	599.29
600.1	600.6	598.6	597.3	598.5	598.2	598.0	597.5	599.0	599.0	601.0	599.2	593.47
595.8	597.6	594.5	594.5	598.8	599.0	600.0	599.4	601.0	599.4	599.6	599.8	592.29
599.0	598.0	600.0	600.4	601.6	602.0	—	—	—	—	—	—	598.29
605.0	607.2	607.0	606.4	605.8	601.2	603.4	603.2	601.0	603.5	607.4	605.0	601.06
605.4	605.8	606.0	606.2	605.6	603.6	607.0	607.0	607.4	609.0	612.0	610.0	602.53
606.1	607.9	608.4	601.9	601.1	604.1	602.3	603.6	601.9	601.9	609.1	611.5	603.76
603.5	601.7	600.9	596.9	598.9	608.9	598.4	601.9	603.7	601.9	605.5	600.7	600.16
592.9	598.1	601.9	601.9	601.3	602.2	602.1	603.9	603.7	604.3	605.5	607.9	596.50
607.1	587.9	583.9	598.3	597.3	603.3	—	—	—	—	—	—	598.83
611.3	610.2	609.9	608.5	608.9	608.3	608.8	609.0	609.9	611.2	613.9	615.0	603.68
600.7	601.7	601.9	602.4	607.9	609.1	608.4	607.9	609.9	609.9	611.9	612.1	601.39
603.32	603.23	602.78	602.55	602.30	601.03	603.80	604.32	601.85	601.31	606.18	607.81	601.03

TEMPERATURE OF THE BILAR MAGNET

43.4	43.1	42.9	43.5	41.0	41.0	43.5	43.2	43.0	42.0	42.0	41.4	41.0	40.5	41.15
47.0	46.5	47.0	47.0	46.2	46.0	45.9	45.7	45.6	45.6	45.7	45.4	45.2	45.0	44.75
49.5	49.5	49.3	49.0	49.0	49.3	49.3	49.7	49.8	49.8	49.6	49.2	49.0	48.9	48.33
51.0	51.5	51.2	53.8	53.0	52.6	52.2	51.6	50.8	50.1	50.3	49.8	49.5	49.5	51.17
51.0	51.0	50.4	50.4	50.0	49.5	48.8	48.1	47.2	47.0	45.6	45.2	44.5	44.1	48.69
47.0	46.3	46.3	46.7	46.9	47.2	47.8	48.4	—	—	—	—	—	—	46.57
53.0	53.0	52.6	52.5	52.0	51.5	51.5	51.5	51.1	50.9	50.7	50.4	50.2	—	50.76
51.0	51.0	53.8	53.4	53.0	53.1	52.7	51.8	51.3	51.2	49.8	48.6	49.2	48.2	51.83
55.4	55.6	55.3	51.8	51.2	51.0	53.4	52.6	52.2	52.0	51.7	51.2	51.2	51.0	52.70
51.0	53.6	53.5	53.6	53.5	53.0	53.1	53.2	53.3	53.5	53.5	54.2	55.0	55.0	53.40
51.8	53.5	55.6	55.8	56.2	56.4	56.4	56.2	55.8	55.6	55.6	55.1	55.0	54.8	55.27
51.3	51.0	51.5	53.0	52.4	52.4	51.7	51.4	—	—	—	—	—	—	51.70
47.5	48.0	47.9	47.5	47.5	47.3	47.0	46.8	46.5	46.2	45.8	45.1	45.0	44.9	46.75
49.7	50.5	50.6	49.8	49.2	48.5	47.8	47.4	47.0	47.0	46.2	46.1	47.0	45.0	46.59
52.4	52.2	52.0	52.7	53.0	53.3	53.9	51.0	51.0	53.6	53.5	53.2	53.0	53.5	50.56
56.3	56.0	56.0	56.0	55.4	55.0	54.5	51.5	51.2	53.5	53.1	52.6	52.5	52.0	54.53
57.0	57.2	55.6	55.7	55.7	55.1	54.5	54.5	53.7	53.2	52.8	52.7	53.0	52.6	51.45
51.8	52.5	52.5	51.5	51.1	50.6	50.0	49.7	—	—	—	—	—	—	49.85
53.2	52.8	52.6	52.0	51.6	51.4	51.4	51.6	51.6	51.3	51.6	52.0	52.5	52.2	51.55
52.7	52.0	52.0	51.6	51.6	51.6	51.8	51.9	51.5	51.0	50.7	51.4	51.8	51.7	51.96
53.4	51.0	51.2	51.0	53.1	52.5	52.5	52.2	51.6	51.5	51.5	51.5	51.5	51.4	52.35
53.6	53.2	53.0	52.5	52.2	52.4	52.0	52.4	52.0	51.7	51.5	51.5	51.5	51.4	52.20
52.5	52.5	52.1	51.8	52.1	52.0	52.2	51.8	51.6	51.6	51.2	51.2	51.2	50.5	51.69
52.0	52.0	51.8	51.7	52.0	51.8	51.2	51.0	—	—	—	—	—	—	49.87
49.6	49.6	49.8	47.4	49.4	48.8	48.7	48.4	48.2	48.0	48.0	47.8	48.1	48.4	48.61
50.2	50.2	52.3	50.4	50.5	49.9	49.7	49.7	49.1	48.5	48.0	47.5	46.5	46.2	49.40
51.90	51.90	51.81	51.55	51.40	51.17	50.93	50.75	49.81	49.55	49.33	49.20	49.19	48.93	50.25

\* Three minutes late.

† Seven minutes late.

HORIZONTAL FORCE.													
One Scale Division = .000987 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Galvanogen Force.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
APRIL.	1	612.8	610.9	610.7	607.7	600.3	596.3	594.1	595.5	600.1	611.9	600.9	607.0
	2	609.9	608.1	607.5	612.8	607.7	601.7	602.4	602.0	601.0	608.0	611.0	613.5
	3	615.0	612.2	610.0	606.0	600.4	593.5	591.0	590.0	597.5	602.5	604.0	603.8
	4	606.0	611.6	612.5	607.0	591.0	586.0	591.0	581.6	592.0	610.4	598.6	601.2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	591.0	571.2	570.0	600.5	572.5	574.0	567.2	577.0	591.6	608.5	630.2	577.0
	7	584.6	580.0	575.0	575.6	572.9	574.2	573.6	570.0	578.8	583.5	587.8	585.2
	8	590.0	586.0	585.4	583.8	578.5	582.0	585.6	587.0	592.0	585.0	591.4	599.0
	9	600.8	599.0	595.0	588.5	582.5	578.9	581.4	587.0	591.0	601.0	602.0	602.8
	10 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	11	602.0	595.2	595.3	595.4	598.2	591.0	597.2	589.5	597.2	598.2	595.0	599.8
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	605.8	612.8	602.4	599.4	599.0	583.8	576.2	578.9	596.0	616.0	594.5	609.0
	14	612.5	603.0	610.0	604.9	593.7	586.0	587.6	590.0	602.0	584.0	611.0	601.0
	15	608.0	603.7	594.0	593.2	581.2	586.0	588.8	595.7	598.6	601.4	612.4	605.2
	16	610.0	600.0	568.0	563.2	566.4	560.0	581.8	588.8	601.2	609.0	621.8	611.6
	17	595.2	593.4	589.0	582.4	585.0	583.2	575.0	579.4	592.0	608.2	604.5	601.0
	18	597.2	591.2	590.6	577.2	570.5	569.2	571.0	579.6	587.0	586.5	586.2	589.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	602.2	600.6	597.0	587.0	582.0	577.0	582.5	587.0	587.0	592.0	603.0	598.0
	21	597.6	599.0	594.0	585.0	577.5	574.0	575.0 <sup>b</sup>	580.3 <sup>c</sup>	585.2	589.4	589.6	589.2
	22	591.5	591.5	586.5	580.6	571.2	579.7	589.8	587.8	591.8	586.8	588.5	593.2
	23	593.8	592.6	588.0	574.2	570.5	571.4	576.1	580.8	585.0	597.8	594.2	598.0
	24	598.8	597.8	591.2	579.0	579.2	581.0	583.8	592.0	600.0	603.0	599.8	598.0
	25	586.0	586.1	583.5	577.9	576.0	582.0	578.9	582.0	585.0	577.0	596.0	584.2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	599.0	601.0	589.5	576.0	585.0	597.0	595.6	600.0	603.3	597.0	590.0	591.8
	28	595.0	590.0	583.0	578.2	580.0	584.6	586.3	590.2	591.4	593.8	587.9	593.0
	29	596.6	594.2	588.0	583.2	579.8	575.0	585.2	591.0	591.8	597.2	599.2	607.0
	30	596.8	592.0	583.8	575.2	582.0	583.8	588.6	591.0	588.0	596.0	593.4	589.0
Hourly Means	599.92	597.16	592.00	587.76	583.56	582.05	583.83	586.96	593.02	597.88	599.80	598.02	

TEMPERATURE OF THE DILUAR MAGNET.													
APRIL.	1	45.7	45.4	45.8	46.8	48.4	49.2	49.4	49.9	50.5	51.6	52.0	51.9
	2	46.4	47.0	47.8	49.0	50.1	50.5	51.4	52.0	52.0	52.2	52.2	52.5
	3	46.9	47.5	49.0	50.0	51.8	52.5	52.7	53.0	53.0	53.9	54.5	54.8
	4	50.6	50.3	50.5	51.9	52.7	53.5	54.0	54.5	54.8	56.0	56.5	56.8
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	53.7	53.5	53.2	53.6	54.5	55.5	56.0	56.4	56.6	57.0	57.2	57.2
	7	51.5	54.0	54.0	54.4	54.9	55.0	55.2	56.5	56.5	57.0	56.8	56.9
	8	51.8	51.4	51.7	51.7	51.8	52.0	52.4	52.5	52.6	52.6	53.2	53.6
	9	48.6	49.5	50.1	51.0	52.4	52.5	52.4	53.0	53.0	54.0	54.5	54.3
	10 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	11	49.6	49.4	49.0	49.2	50.1	51.0	52.0	53.4	53.5	53.5	53.0	52.9
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	44.2	44.3	44.4	45.2	46.2	45.7	45.5	45.4	45.4	46.4	47.4	47.7
	14	44.3	45.5	46.3	46.9	47.4	48.0	47.9	48.2	48.5	49.4	50.0	50.0
	15	48.5	48.5	48.5	49.0	49.6	49.5	49.5	49.6	49.8	50.1	51.0	51.5
	16	47.0	48.0	49.0	49.0	49.6	50.0	50.8	51.0	51.6	51.6	52.2	52.6
	17	50.0	50.3	51.0	52.2	53.9	55.2	55.8	56.5	56.7	57.0	57.5	57.4
	18	53.4	54.0	54.2	54.6	55.4	55.9	56.3	56.6	57.0	58.0	58.5	59.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	50.7	51.3	52.8	53.4	55.0	55.6	56.0	56.9	57.4	58.0	58.6	59.0
	21	57.0	57.2	57.5	58.7	59.6	60.7	61.4	62.2	63.0	64.0	64.3	64.2
	22	59.4	59.0	58.5	58.5	58.3	58.5	58.5	59.3	59.6	60.0	60.2	60.3
	23	59.6	59.5	59.7	60.0	60.8	60.7	61.0	61.2	61.2	61.3	61.3	60.6
	24	59.8	59.8	59.6	59.6	60.0	60.8	61.2	61.6	61.9	61.8	61.9	62.0
	25	60.4	60.0	59.5	58.8	58.4	58.4	58.6	59.0	58.6	58.5	58.5	58.2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	51.4	52.7	54.0	55.0	57.0	57.4	57.5	57.9	57.9	58.6	59.4	60.0
	28	56.5	57.4	58.0	58.2	58.6	59.4	59.6	59.8	59.8	60.0	60.2	60.3
	29	57.5	57.4	57.0	56.4	57.2	57.4	57.6	57.8	57.7	57.8	57.5	57.5
	30	57.2	56.7	57.8	57.8	58.7	59.2	59.8	60.5	61.2	61.8	62.0	62.0
Hourly Means	52.19	52.38	52.76	53.21	54.10	54.56	54.90	55.39	55.59	56.10	56.42	56.53	

<sup>a</sup> Good Friday.

<sup>b</sup> Two minutes late.

<sup>c</sup> Three minutes late.

1' 63.

10h.	11h.
607'9	607'0
613'5	613'5
604'8	604'8
601'2	601'2
597'4	597'0
577'0	577'0
585'2	585'2
599'0	599'0
602'8	602'8
599'8	599'8
609'0	609'0
603'0	603'0
605'2	605'2
611'6	611'6
604'0	604'0
585'2	585'2
598'0	598'0
589'2	589'2
593'2	593'2
594'2	594'2
598'0	598'0
591'2	591'2
593'4	593'4
599'80	598'02

HORIZONTAL FORCE.													Daily and Monthly Means.
One Scale Division = .000087 parts of the H. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.		
608'9	607'4	606'9	605'4	614'2	597'1	593'0	601'9	602'8	606'0	608'3	609'9	604'60	
612'0	612'0	612'0	611'8	612'2	610'0	611'8	613'2	615'4	609'0	609'2	611'6	609'41	
606'2	601'6	604'0	601'2	604'0	604'2	606'8	607'0	608'1	607'8	611'7	611'2	604'40	
597'4	597'0	601'0	598'6	598'5	598'3	—	585'0	584'8	596'0	601'0	601'0	597'65	
567'1	571'2	570'0	568'6	566'0	567'0	572'0	579'0	581'0	576'0	572'0	587'0	579'48	
580'0	584'2	577'0	576'0	579'5	579'0	575'0	585'0	586'8	581'0	591'6	593'7	580'50	
595'0	596'5	591'0	596'0	598'0	596'6	601'6	596'0	597'4	598'8	599'8	599'8	592'42	
601'4	601'0	601'6	598'8	594'2	596'0	—	—	—	—	—	—	—	
—	—	—	—	—	—	595'0	589'0	604'0	602'8	602'0	598'8	595'60	
608'0	599'0	598'5	601'0	599'0	603'0	607'2	608'8	610'0	612'4	618'8	612'0	600'01	
596'0	603'0	605'0	601'8	604'2	605'0	602'2	606'5	592'6	605'8	606'0	609'2	602'97	
602'2	601'0	596'8	595'8	599'2	590'2	591'2	—	584'0	577'5	595'0	574'0	594'83	
585'0	591'4	574'6	589'0	595'0	578'6	602'4	588'0	—	580'0	594'0	594'0	588'69	
607'0	591'0	591'4	592'0	590'0	591'2	591'0	592'0	593'6	594'0	596'0	596'2	592'36	
596'0	588'2	585'0	586'2	590'0	593'2	—	—	—	—	—	—	—	
593'0	584'0	591'2	594'4	595'8	593'6	594'2	596'4	595'8	596'4	597'6	597'0	592'70	
587'4	585'0	581'8	581'0	580'0	568'5	582'0	584'5	584'0	587'7	585'0	586'5	581'80	
592'0	566'8	587'0	585'8	585'9	586'9	585'2	586'0	587'0	588'2	589'4	592'2	586'26	
607'0	600'8	601'1	590'0	590'0	589'0	593'0	590'8	590'0	592'4	591'2	589'4	590'00	
590'0	590'0	590'0	585'0	571'2	570'6	566'0	576'2	575'0	590'0	579'8	—	586'08	
590'0	587'2	585'8	582'4	593'2	596'6	—	—	—	—	—	—	—	
—	—	—	—	—	—	602'0	602'8	594'8	597'8	601'0	600'0	588'97	
592'0	592'5	590'2	591'8	591'4	595'0	595'6	592'0	589'0	595'5	596'2	592'0	593'39	
591'2	595'0	591'5	589'0	591'0	590'0	593'6	597'5	595'0	595'0	595'0	597'0	590'59	
598'0	598'0	594'1	592'0	590'5	595'0	597'0	600'0	600'8	598'0	597'3	603'0	593'70	
594'0	593'0	591'5	589'0	590'0	589'2	592'0	595'4	592'2	590'0	591'8	591'8	589'85	
596'15	596'49	592'85	591'52	593'10	591'36	592'98	591'68	595'01	595'56	597'76	597'86	593'09	

52'0	51'9
52'2	52'5
54'5	51'8
56'5	56'8
—	—
57'2	57'2
56'8	56'9
53'2	53'6
54'5	51'3
—	—
53'0	52'9
—	—
47'4	47'7
50'0	50'0
51'0	51'5
52'2	52'6
57'5	57'4
58'5	59'0
—	—
58'6	59'0
61'3	61'2
60'2	60'3
61'3	60'6
61'9	62'0
58'5	58'2
—	—
59'4	60'0
60'2	60'3
57'5	57'5
62'0	62'0
56'42	56'53

TEMPERATURE OF THE BIFILAR MAGNET.												
52'4	52'2	51'8	51'0	50'4	49'9	49'7	48'3	47'6	47'4	47'3	47'0	49'23
52'5	52'0	51'5	51'2	50'7	50'3	49'7	49'2	48'4	48'2	47'8	47'2	50'08
56'3	51'5	54'0	53'4	52'6	52'2	51'6	51'1	51'2	51'1	51'2	51'4	52'09
56'8	56'3	55'8	55'1	54'8	54'6	—	—	—	—	—	—	—
—	—	—	—	—	—	50'5	53'4	51'0	51'2	51'1	54'0	51'11
57'0	56'6	56'8	56'2	55'6	55'6	55'5	55'0	54'8	54'8	54'5	51'5	55'47
56'6	56'6	56'8	56'6	56'5	56'0	55'5	55'0	54'8	53'8	53'2	52'7	55'41
53'9	53'4	53'0	51'7	51'4	51'4	50'7	50'4	50'0	49'6	49'2	49'0	51'71
53'8	53'5	53'0	52'8	51'8	51'6	—	—	—	—	—	—	—
—	—	—	—	—	—	46'6	47'0	47'5	48'1	48'5	49'0	51'91
—	—	—	—	—	—	—	—	—	—	—	—	—
47'4	47'7	46'5	46'0	45'6	45'3	44'6	44'4	44'0	44'0	44'0	44'2	49'42
50'0	49'2	49'4	49'4	49'4	49'6	49'4	48'7	48'6	49'0	49'0	49'0	48'45
51'0	51'6	51'7	51'6	51'1	50'6	50'0	49'8	—	49'9	48'4	48'0	49'74
52'2	52'2	52'6	52'0	51'7	51'4	51'3	51'0	—	50'0	50'2	50'0	50'75
57'5	57'2	56'8	56'5	56'0	56'0	54'8	54'3	54'0	54'5	53'8	53'4	51'92
58'5	59'0	58'2	57'8	57'5	57'5	—	—	—	—	—	—	55'52
—	—	—	—	—	—	52'6	52'2	52'0	51'4	51'2	50'6	56'57
58'6	59'0	58'2	58'2	58'0	57'4	57'5	57'2	57'2	57'2	57'4	57'2	57'2
61'3	61'2	63'2	62'9	62'5	62'3	62'0	61'8	61'4	61'0	60'6	60'0	61'46
60'2	60'0	60'3	60'4	59'0	59'5	59'4	59'1	59'4	59'6	59'7	59'8	59'13
61'3	60'6	60'8	60'7	60'5	60'1	60'1	60'0	60'0	59'7	59'7	59'8	60'40
61'9	61'8	61'6	61'2	61'0	61'0	60'8	60'8	60'6	60'8	60'8	60'6	60'96
58'5	57'2	57'2	57'3	57'0	56'8	—	—	—	—	—	—	—
—	—	—	—	—	—	52'6	52'3	51'7	51'3	51'0	50'7	56'66
59'4	60'0	60'2	59'2	59'0	58'4	58'1	57'6	57'2	57'0	57'0	56'5	57'50
60'2	59'9	59'4	59'0	58'8	58'5	58'4	58'4	58'4	58'0	58'0	57'8	58'56
57'5	57'4	57'4	58'0	57'9	57'5	57'5	57'4	57'4	57'5	57'5	57'3	57'16
62'0	61'4	61'2	60'8	60'8	60'6	60'6	60'6	60'4	60'2	60'0	59'9	60'13
56'52	56'16	55'91	55'56	55'16	54'91	53'85	53'71	53'48	53'22	53'10	52'90	54'53

HORIZONTAL FORCE.												
One Scale Division = 0.00087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.												
Mean Baromet- gen Force.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	593'0	591'2	581'6	575'0	577'0	575'2	578'8	586'4	591'0	591'2	591'0	593'4
2	593'5	592'1	583'8	573'0	571'0	578'5	587'0	591'0	592'2	592'0	589'4	584'2
3	—	—	—	—	—	—	—	—	—	—	—	—
4	586'0	585'2	576'5	562'2	545'0	572'2	576'3	595'6	575'8	588'4	621'9	597'5
5	570'0	566'0	563'0	561'8	561'6	565'2	561'8	573'0	581'8	581'2	587'8	593'0
6	577'0	579'2	574'2	570'2	562'8	566'4	571'0	575'8	587'0	590'0	579'8	582'0
7	580'5	580'6	576'0	573'0	571'4	561'5	567'5	576'5	579'0	593'5	573'0	593'0
8	582'0	581'0	580'0	575'3	563'8	562'0	567'0	571'0	591'4	590'8	591'0	587'8
9	581'0	579'0	561'0	561'4	571'0	580'0	589'4	592'2	603'2	606'4	588'2	573'6
10	—	—	—	—	—	—	—	—	—	—	—	—
11	591'0	590'2	590'6	589'2	588'0	590'0	587'6	592'0	610'0	608'0	603'0	601'5
12	600'9	578'6	579'8	517'4	561'4	580'2	578'8	580'0	616'5	603'5	660'0	637'5
13	578'0	579'4	573'0	568'2	569'0	568'5	571'5	591'0	585'0	597'0	582'0	597'0
14	572'0	563'2	567'0	553'0	560'0	558'0	559'5	570'0	581'4	582'6	582'4	582'4
15	570'0	567'0	561'0	556'2	561'0	566'0	569'2	577'2	578'8	579'8	579'9	582'8
16	589'0	581'8	583'2	568'8	570'0	573'5	577'2	581'4	586'2	590'6	587'8	575'0
17	—	—	—	—	—	—	—	—	—	—	—	—
18	588'2	590'0	581'8	574'6	568'2	570'0	571'0	584'2	600'0	602'0	598'5	602'5
19	602'0	598'0	590'2	587'7	586'7	592'0	591'4	600'0	587'0	600'0	608'0	598'2
20	581'5	595'5	587'0	586'0	580'0	596'0	602'0	610'8	620'0	598'0	601'8	595'4
21	587'0	588'2	584'0	566'7	575'8	581'0	587'4	592'8	609'6	601'8	600'5	592'4
22	586'6	584'0	573'2	575'8	578'5	583'2	579'2	578'8	589'2	591'0	591'0	597'0
23	606'0	600'5	581'8	573'4	551'6	548'2	582'5	590'0	591'9	588'4	590'8	592'0
24	—	—	—	—	—	—	—	—	—	—	—	—
25	566'5	572'8	564'0	517'5	562'8	571'0	569'5	569'6	585'0	583'6	581'0	582'2
26	583'5	583'0	576'0	567'0	563'0	566'6	572'0	572'8	581'2	581'4	581'0	585'2
27	578'0	576'0	568'0	561'8	561'4	566'4	573'2	571'8	580'6	576'2	572'8	576'2
28	577'2	573'4	574'5	562'0	550'5	546'8	555'6	566'8	572'4	575'8	577'6	578'0
29	583'5	577'0	571'8	566'4	562'0	563'9	567'0	572'8	577'5	580'0	582'5	588'0
30	578'0	567'2	566'0	551'2	560'2	555'2	551'2	551'2	562'2	575'0	581'0	594'2
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	583'92	581'66	575'85	567'81	566'90	570'67	575'10	581'57	589'19	590'32	592'30	591'08

TEMPERATURE OF THE PILLAR MAGNET.												
1	59'9	60'2	60'6	61'0	61'0	61'0	61'4	62'0	62'0	62'0	62'0	62'0
2	61'2	61'2	61'9	62'1	63'4	64'0	61'0	61'2	61'2	61'6	63'2	65'4
3	—	—	—	—	—	—	—	—	—	—	—	—
4	59'0	59'5	60'5	61'3	62'7	63'5	61'8	61'2	61'8	65'4	66'0	66'7
5	60'0	60'0	60'4	60'8	61'3	61'8	62'2	62'2	62'3	63'0	61'4	63'8
6	61'0	61'0	61'5	62'5	63'0	63'3	63'2	63'5	61'2	63'0	63'0	63'0
7	57'2	57'8	58'0	58'8	59'5	60'2	60'5	61'0	61'0	61'4	61'5	61'5
8	58'6	59'5	60'4	62'4	63'4	63'5	61'0	61'5	61'4	61'6	61'6	61'0
9	62'0	62'0	62'0	61'8	61'6	61'8	61'8	62'0	61'6	61'8	62'0	62'0
10	—	—	—	—	—	—	—	—	—	—	—	—
11	53'0	53'0	53'5	51'4	51'4	52'0	52'4	53'0	53'0	53'8	55'0	55'4
12	53'8	51'4	55'4	56'3	57'3	58'2	58'2	58'5	59'0	60'0	60'5	61'5
13	56'5	56'5	56'6	57'0	58'5	59'5	60'0	61'0	62'0	63'0	63'5	61'0
14	62'0	62'2	62'5	63'4	61'3	65'3	65'8	66'0	66'4	66'8	67'0	67'2
15	63'2	63'0	62'5	62'3	62'7	63'2	63'6	61'4	61'3	61'8	65'2	65'5
16	59'6	59'2	59'4	60'4	61'9	63'0	63'6	64'2	61'7	65'2	65'7	66'0
17	—	—	—	—	—	—	—	—	—	—	—	—
18	62'8	62'2	61'8	61'4	62'0	62'5	62'2	61'5	61'4	60'3	61'4	61'5
19	51'5	55'5	56'3	57'0	58'5	59'0	58'6	58'5	58'6	59'2	60'2	60'4
20	55'7	56'7	57'6	58'8	60'0	60'5	61'0	61'3	62'0	62'6	62'8	63'2
21	57'5	58'3	59'0	59'2	59'4	59'8	59'4	59'0	59'0	59'2	59'8	60'2
22	51'3	55'0	56'0	57'4	58'5	59'6	60'2	60'4	60'7	61'0	60'8	60'6
23	58'2	58'5	58'5	59'4	60'4	61'0	62'0	63'0	63'8	61'6	65'1	65'1
24	—	—	—	—	—	—	—	—	—	—	—	—
25	61'2	61'5	62'4	63'5	64'8	66'2	66'6	67'3	67'7	68'0	68'2	68'3
26	66'0	69'5	67'4	68'4	69'7	70'4	71'2	71'8	72'5	73'2	73'4	73'6
27	69'0	70'4	71'0	72'0	72'8	73'6	73'8	74'0	74'4	75'0	75'4	75'6
28	69'2	69'6	70'8	71'5	71'9	71'9	72'0	72'3	73'1	72'9	72'8	73'0
29	68'2	68'9	69'8	70'7	71'7	72'0	72'0	72'0	73'0	73'0	73'2	73'5
30	69'0	69'0	69'0	68'7	69'4	70'8	71'7	72'4	73'0	73'5	73'8	73'8
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	60'48	60'83	61'34	61'90	62'73	63'35	63'63	63'98	61'29	61'67	65'05	65'26

12h.
590'0
579'2
—
572'4
580'8
574'0
582'0
588'2
573'8
582'4
—
601'8
585'7
597'0
597'8
—
599'0
591'0
590'4
589'0
590'0
591'0
—
595'0
586'4
576'0
574'0
576'5
570'2
—
65'3
65'6
—
67'0
61'0
63'0
61'5
63'8
61'0
61'8
—
56'4
62'0
61'4
67'0
65'5
65'9
—
61'5
60'2
63'6
60'2
60'2
60'2
60'2
65'2
65'0
64'0
63'8
63'6
63'2
63'8
—
65'28

HORIZONTAL FORCE.

One Scale Division = 1/1000000 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
580'0	580'2	588'6	587'8	589'2	579'8	589'0	590'7	590'2	590'0	592'8	590'0	587'46
579'2	578'2	577'2	577'4	576'7	580'0	—	—	—	—	—	—	581'90
572'4	588'0	569'4	563'0	572'5	555'0	577'0	572'0	575'0	573'2	583'0	580'0	576'08
580'8	572'0	571'0	566'0	558'0	565'0	571'0	565'0	566'0	574'0	571'0	573'0	570'61
574'0	582'0	581'0	583'0	577'0	581'2	579'6	580'8	585'6	580'4	576'2	578'5	578'12
588'2	584'7	579'0	582'2	584'4	570'2	587'2	578'6	593'2	589'2	590'0	591'2	581'04
573'8	569'8	573'8	575'4	571'0	566'0	575'4	583'9	584'0	584'0	583'5	587'0	578'20
582'4	584'2	576'4	575'5	575'4	576'2	—	—	—	—	—	—	583'19
—	—	—	—	—	—	588'5	590'0	591'5	591'5	590'4	588'2	589'95
601'8	604'0	602'0	595'7	572'0	590'0	599'0	581'0	590'2	581'4	574'5	523'3	586'78
585'7	581'0	575'0	580'2	575'0	581'2	568'0	586'4	581'2	585'0	573'8	565'5	577'91
597'0	585'6	567'8	576'8	571'2	570'0	575'0	573'0	575'7	573'5	574'6	578'3	570'67
597'8	577'6	571'2	568'0	562'0	567'6	566'0	568'7	568'2	571'4	573'0	573'0	575'80
581'0	578'0	578'0	577'0	578'0	580'2	580'0	581'0	583'0	583'0	583'0	588'2	573'67
576'0	576'0	577'1	581'0	583'0	583'0	—	—	—	—	—	—	581'64
—	—	—	—	—	—	585'0	585'0	583'2	588'0	587'2	587'4	587'75
599'0	576'0	600'0	584'8	584'0	587'2	565'0	582'4	600'8	599'6	595'4	601'4	591'20
591'0	596'0	596'2	590'4	583'8	580'4	559'2	584'6	593'0	584'8	587'0	595'2	591'91
590'4	589'2	588'2	584'5	584'0	586'8	590'2	586'2	592'0	591'4	583'0	586'0	588'75
589'0	588'6	587'4	590'0	592'0	590'0	592'5	591'0	587'0	590'0	587'0	578'2	588'66
590'0	590'7	591'8	593'0	596'0	594'0	595'0	593'2	590'0	586'2	600'0	597'4	589'75
591'0	586'0	586'0	583'2	582'0	583'2	—	—	—	—	—	—	582'49
—	—	—	—	—	—	562'0	583'4	578'4	585'4	587'0	572'0	574'88
585'0	583'7	578'0	578'4	576'8	573'2	579'4	578'0	578'8	576'8	571'5	577'0	575'58
586'4	586'0	571'8	569'5	574'5	570'8	570'0	570'0	576'0	572'2	578'0	576'0	571'41
576'0	571'8	570'0	568'0	569'0	567'0	565'3	569'0	570'0	569'0	573'0	578'4	570'40
574'0	574'0	571'0	571'0	571'0	571'0	571'8	570'8	572'4	575'6	577'1	579'0	573'87
576'5	575'2	578'0	578'2	580'0	569'2	569'4	570'4	571'0	572'6	567'0	573'0	565'00
570'2	570'4	568'0	551'4	557'8	573'2	—	—	—	—	—	—	—
—	—	—	—	—	—	556'0	553'8	568'0	558'7	566'5	567'5	—
585'14	582'27	579'79	578'00	576'97	576'59	575'46	578'25	581'13	580'66	581'10	579'45	580'05

TEMPERATURE OF THE DIPOLAR MAGNET.

62'3	61'8	61'7	61'5	61'4	61'3	61'6	62'0	61'8	61'8	61'7	61'4	61'47
65'6	65'4	65'4	65'1	65'3	65'0	—	—	—	—	—	—	63'37
—	—	—	—	—	—	62'5	62'0	61'6	61'4	60'8	59'5	63'61
67'0	67'0	66'5	65'8	65'5	61'8	64'5	63'2	62'5	61'5	61'0	60'6	62'18
64'0	64'0	63'6	63'5	63'0	62'5	62'3	61'8	61'8	61'8	61'5	61'3	61'57
63'0	62'7	62'5	62'0	61'6	60'8	60'4	60'0	59'2	58'6	58'0	57'6	59'74
61'5	60'8	60'8	60'6	60'0	59'6	59'2	59'0	58'5	58'5	58'5	58'4	62'82
63'8	63'6	63'4	63'0	63'0	62'5	62'7	62'5	62'5	62'4	62'5	62'0	—
61'8	62'0	62'2	62'4	62'5	62'7	—	—	—	—	—	—	60'30
—	—	—	—	—	—	56'5	56'0	55'4	54'5	54'1	54'7	53'82
56'4	56'2	56'0	55'0	54'5	54'2	54'0	54'0	53'8	53'8	53'4	53'4	58'68
62'0	62'0	61'5	61'2	60'6	60'0	59'2	58'6	58'2	57'6	57'4	57'0	61'41
61'4	61'0	63'6	63'4	62'8	62'4	62'4	62'7	62'7	62'7	62'5	62'2	65'20
67'0	66'6	66'2	66'0	65'7	65'4	65'2	65'0	65'0	65'0	64'9	64'0	63'20
65'5	65'0	64'6	64'5	64'4	64'2	63'5	—	—	—	—	—	—
65'9	65'9	65'4	64'8	64'2	63'5	—	—	—	—	—	—	63'58
—	—	—	—	—	—	64'5	64'5	63'8	63'6	63'4	63'5	59'85
61'5	60'5	59'5	59'2	58'8	58'8	58'2	57'2	56'3	55'6	55'2	54'6	57'97
60'2	60'0	59'5	58'8	58'4	58'0	57'8	57'2	56'9	56'5	56'2	55'4	60'50
63'6	63'2	62'8	62'5	62'0	61'4	60'7	59'8	59'4	58'7	58'4	57'4	58'28
60'2	59'7	59'2	58'9	58'4	58'0	57'4	56'5	56'0	55'4	55'0	54'3	58'54
60'2	59'8	59'4	59'0	58'7	58'5	58'0	57'7	57'5	57'2	57'2	57'2	—
65'0	65'0	64'5	64'5	64'5	64'5	—	—	—	—	—	—	62'47
—	—	—	—	—	—	62'8	62'4	62'0	61'6	61'5	61'3	66'46
68'0	68'0	68'5	68'4	68'2	68'0	67'6	67'0	66'9	66'5	66'3	66'0	70'75
73'8	73'6	72'6	72'1	71'7	71'3	70'8	70'3	70'0	69'7	69'1	69'0	73'00
75'7	75'7	75'4	74'6	74'0	73'4	73'1	71'5	71'0	70'5	70'0	70'0	71'41
73'0	73'5	72'7	72'4	72'0	71'5	70'6	70'4	70'0	69'6	69'2	69'0	71'14
72'1	72'0	71'4	71'4	71'0	70'8	70'6	70'4	70'2	70'0	70'0	69'5	71'21
73'8	73'8	72'5	72'3	72'1	71'6	—	—	—	—	—	—	—
—	—	—	—	—	—	71'5	71'2	70'7	70'2	69'7	69'2	—
65'28	65'07	64'67	64'30	63'97	63'59	62'95	62'50	62'12	61'76	61'46	61'05	63'18

\* Twenty minutes lat.



HORIZONTAL FORCE.												12h.		
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.														
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	Sc. Div.	
JUNE.	1	572'3	563'5	567'3	566'0	555'4	565'0	558'2	572'2	575'2	576'2	577'2	584'2	573'8
	2	570'0	567'0	563'0	565'6	560'8	561'6	560'1	556'8	576'2	581'8	589'8	606'5	603'5
	3	573'8	569'0	564'2	563'8	561'0	565'6	566'2	566'5	571'8	574'2	575'4	588'0	585'0
	4	571'4	571'2	559'8	560'8	557'8	553'5	560'0	566'0	580'4	578'0	576'0	578'0	576'0
	5	572'4	575'4	576'5	574'5	570'0	568'7	570'0	563'0	577'0	576'5	587'0	589'0	590'2
	6	588'9	588'0	580'8	576'5	578'0	581'0	581'0	592'2	598'0	594'6	604'0	599'8	598'2
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	597'0	592'0	587'0	578'8	573'4	571'6	577'0	580'6	580'0	586'4	588'5	598'6	606'8
	9	586'6	581'2	572'8	566'2	559'6	561'8	563'8	583'5	586'0	586'0	587'2	593'0	592'0
	10	581'2	582'2	584'2	575'2	565'2	568'0	568'2	573'2	575'0	573'0	582'2	582'8	588'0
	11	578'8	576'8	575'8	575'8	574'7	573'5	570'8	573'0	578'0	586'0	588'5	590'0	589'2
	12	582'5	583'0	579'2	574'0	574'0	580'0	578'2	580'0	576'2	580'2	590'0	591'8	585'8
	13	604'0	589'0	592'5	590'7	587'0	581'7	591'4	591'4	591'2	593'4	597'0	591'6	588'0
	14	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	574'8	572'2	576'0	580'0	564'5	544'5	574'8	573'5	572'4	591'0	590'8	595'0	579'0
	16	567'8	566'6	577'8	552'0	568'0	570'6	570'0	576'6	572'2	576'0	578'0	570'9	586'0
	17	577'2	579'5	574'8	571'5	563'0	560'0	572'0	571'0	592'0	589'0	589'0	576'4	568'0
	18	574'0	577'0	568'5	563'2	567'0	572'2	571'0	579'4	581'0	579'0	586'6	586'0	584'2
	19	568'5	569'0	562'5	555'0	553'4	561'6	572'6	559'8	586'7	586'8	583'1	574'0	571'4
	20	576'4	575'0	571'2	569'4	565'5	563'8	561'2	564'0	569'2	576'8	578'2	583'3	582'0
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	599'8	597'4	587'6	596'2	567'8	580'8	590'0	561'0	591'0	596'6	586'5	596'0	603'0
	23	597'2	594'2	585'5	576'0	573'6	570'2	588'0	575'5	590'5	593'5	578'0	590'0	590'2
	24	584'0	583'7	573'6	574'5	572'5	576'0	583'0	589'2	601'2	597'0	587'2	584'6	571'0
	25	578'6	576'0	566'6	569'0	575'0	569'8	578'0	583'2	580'2	579'2	576'0	574'6	576'0
	26	576'0	573'2	572'2	568'2	566'6	567'5	569'0	569'2	579'0	588'4	570'8	571'3	574'0
	27	576'4	571'2	571'8	566'8	562'0	560'4	558'0	559'8	569'5	575'0	569'5	577'0	581'0
	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	575'8	572'0	565'2	566'2	562'7	567'4	573'2	563'5	580'0	589'2	568'0	571'2	577'0
	30	569'2	571'0	568'4	553'0	541'8	547'2	557'8	551'3	571'0	571'2	574'0	574'0	563'0
Hourly Means	579'79	577'17	574'03	570'65	566'67	567'08	571'79	574'17	580'80	583'65	583'87	585'29	583'97	
TEMPERATURE OF THE BIPOLAR MAGNET.														
JUNE.	1	68'5	69'5	70'0	70'5	69'8	70'6	70'8	71'0	71'5	72'0	72'6	73'2	73'0
	2	69'4	69'2	69'0	69'5	69'8	70'0	70'0	69'8	70'0	70'0	70'2	70'0	70'2
	3	65'5	66'3	66'7	67'2	67'3	67'5	67'6	67'5	67'6	68'2	68'9	69'4	69'6
	4	66'4	67'0	67'4	67'5	67'8	68'1	68'7	69'4	69'4	69'5	69'4	69'0	68'5
	5	65'4	65'2	65'0	64'9	64'5	64'4	64'4	64'9	65'0	65'0	65'7	65'7	65'5
	6	61'1	61'2	62'0	62'9	63'6	63'5	63'7	63'7	64'0	64'5	64'5	65'0	64'5
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	58'5	59'0	60'1	61'3	62'7	63'7	64'2	64'6	65'2	65'8	66'4	66'7	66'5
	9	60'0	60'5	61'2	62'2	61'0	65'4	65'7	66'1	66'5	67'2	67'7	68'3	68'4
	10	62'6	63'2	61'3	65'2	66'4	66'7	67'2	67'8	68'9	70'0	70'5	71'0	71'0
	11	65'5	65'7	66'0	66'4	68'0	68'6	68'7	69'0	68'5	68'5	69'2	69'2	69'4
	12	63'6	64'2	65'0	65'9	66'0	66'7	67'0	67'0	67'2	67'2	67'0	67'4	67'6
	13	63'2	64'0	64'5	65'2	66'4	67'2	67'5	67'9	68'1	68'5	68'4	68'2	68'0
	14	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	66'2	66'5	67'0	68'4	69'9	70'8	71'2	71'7	72'2	73'0	73'8	74'2	74'6
	16	69'4	69'4	69'8	70'2	71'0	71'4	71'2	71'2	71'4	71'5	71'8	72'0	72'2
	17	67'1	67'4	68'2	68'8	69'7	70'3	71'0	71'5	72'4	73'5	74'0	74'4	74'6
	18	69'5	69'4	69'5	70'0	71'2	71'8	72'6	73'4	73'8	74'0	74'5	74'6	74'8
	19	71'5	71'6	71'6	71'7	72'5	72'6	73'5	74'5	75'4	76'5	76'7	77'2	77'0
	20	70'6	70'4	70'2	69'8	69'6	70'0	70'2	70'2	70'0	69'8	69'5	69'0	69'0
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	59'2	59'0	59'4	60'5	61'7	62'8	63'5	64'0	64'4	64'8	65'2	65'0	64'7
	23	61'5	61'2	61'9	62'7	61'8	66'0	66'9	68'0	68'4	69'5	70'3	70'5	70'5
	24	65'0	65'3	66'0	67'0	67'9	68'7	70'0	70'7	71'7	72'0	73'3	73'8	73'9
	25	68'7	69'0	69'8	70'8	71'7	73'2	73'8	75'0	75'7	76'4	76'5	77'0	77'0
	26	70'8	70'5	70'7	70'6	71'4	72'5	73'2	74'0	74'5	75'5	76'0	76'2	76'6
	27	72'0	71'8	72'0	72'0	72'2	73'0	73'6	73'8	74'0	74'0	74'0	74'0	74'0
	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	71'5	71'5	71'5	71'5	71'4	73'4	71'4	75'0	75'5	76'0	76'4	76'8	77'0
	30	73'3	74'0	74'7	75'7	76'9	77'5	77'8	78'2	78'3	78'7	79'0	79'5	79'5
Hourly Means	66'38	66'62	67'06	67'63	68'37	69'08	69'55	70'00	70'37	70'82	71'21	71'43	71'45	

re, 1'63.

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 577'2	Sc. Div. 584'2	Sc. Div. 575'8	Sc. Div. 574'8	Sc. Div. 570'2	Sc. Div. 544'5	Sc. Div. 532'4	Sc. Div. 548'2	Sc. Div. 531'8	Sc. Div. 515'2	Sc. Div. 552'2	Sc. Div. 555'0	Sc. Div. 550'0	Sc. Div. 565'0	Sc. Div. 561'58
589'8	606'5	603'5	569'2	561'0	555'2	546'0	549'0	550'0	565'0	558'0	570'0	575'6	576'0	569'24
575'4	588'0	585'0	587'2	571'0	572'0	574'0	571'2	573'0	572'2	574'6	573'2	572'0	578'4	572'64
576'0	578'0	576'0	574'0	574'0	579'0	576'8	573'2	571'8	570'0	565'7	563'8	575'2	575'6	570'33
580'0	589'0	590'2	584'3	581'6	586'2	588'5	569'8	568'0	581'0	587'1	584'2	589'0	589'2	579'13
604'0	599'8	598'2	594'8	581'2	672'8	574'0	574'7	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	587'0	585'8	588'0	588'2	590'8	594'0	587'18
588'5	598'6	592'0	606'5	595'0	590'0	576'0	572'5	571'0	558'0	581'0	559'0	586'0	590'8	583'06
587'2	593'0	588'0	573'5	575'0	558'5	560'0	553'0	569'0	572'0	574'3	575'2	574'3	577'5	574'25
582'2	582'8	589'2	580'5	577'0	579'0	576'2	573'0	572'4	574'2	576'8	578'4	579'0	576'4	576'72
588'5	590'0	585'8	584'3	580'2	573'4	576'5	577'4	579'8	579'2	579'2	577'2	575'5	577'0	578'76
590'0	591'8	585'8	581'8	582'4	582'8	585'4	587'0	596'0	590'0	590'2	594'0	594'0	601'0	584'98
597'0	591'6	588'0	588'2	578'2	574'8	575'6	575'5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	574'5	577'0	584'0	574'5	575'0	583'2	585'39
590'8	595'0	587'0	582'2	566'3	561'5	560'0	561'8	570'0	566'0	574'6	570'0	568'0	577'0	572'75
587'0	570'9	586'0	589'0	570'0	566'0	582'6	575'0	572'2	571'0	578'8	572'0	557'8	580'6	572'77
589'0	576'4	588'0	573'2	570'0	570'0	574'8	572'8	575'0	577'0	573'5	576'5	574'0	574'0	574'63
586'6	586'0	584'2	569'2	574'0	560'5	559'4	565'8	564'0	544'5	560'0	569'2	569'0	566'0	570'65
583'1	574'0	581'4	566'0	568'0	568'0	566'0	567'0	567'2	568'0	567'0	567'0	571'0	573'2	569'70
578'2	583'3	582'0	582'0	581'0	579'0	581'0	576'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	596'0	590'8	590'4	583'7	578'2	598'8	578'41
586'5	596'0	601'0	601'0	575'0	569'2	581'4	585'0	587'4	589'4	591'0	586'8	592'4	582'4	588'65
578'0	590'0	590'2	591'0	581'2	577'2	582'2	578'6	580'4	585'4	584'8	583'5	581'2	582'0	583'75
587'2	584'6	571'0	575'6	575'8	575'2	577'6	578'5	577'8	579'0	581'0	579'0	584'0	585'6	581'11
576'0	574'6	574'0	561'6	567'5	564'7	560'8	567'4	572'0	574'0	572'0	571'0	572'2	576'0	572'81
570'8	571'3	574'0	579'0	584'8	571'0	570'2	576'0	579'0	571'5	570'2	569'0	575'3	573'8	573'42
569'5	577'0	581'0	581'0	578'0	570'0	574'6	574'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	556'8	573'8	569'2	565'4	576'2	575'0	570'52
568'0	571'2	567'0	577'2	571'0	551'8	559'2	556'4	557'2	560'8	565'6	568'5	560'0	565'2	567'80
574'0	574'0	563'0	569'8	565'2	565'0	567'6	560'7	558'0	560'0	568'0	567'2	566'4	578'5	565'05
583'37	585'29	583'97	580'77	575'06	569'63	570'84	566'98	571'43	572'71	575'29	573'90	575'47	579'70	575'55

TEMPERATURE OF THE BILBAR MAGNET.

72'6	73'2	75'0	72'8	72'4	72'2	72'1	71'6	71'3	70'9	70'5	70'3	69'9	69'4	71'10
70'2	70'0	70'2	69'6	69'2	69'0	68'5	68'0	67'8	67'8	66'8	66'5	66'0	65'5	68'80
68'9	69'4	69'4	69'4	69'0	69'0	68'6	68'4	68'0	67'8	67'6	67'2	67'0	66'6	67'83
69'4	69'0	68'5	68'4	68'0	67'8	67'6	67'4	67'0	67'0	66'6	66'4	66'0	65'8	67'75
65'7	65'7	65'5	65'5	65'2	64'8	64'5	64'2	63'5	62'6	62'2	62'0	61'5	61'3	64'29
64'5	65'0	64'5	64'2	64'0	63'2	62'7	62'2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	60'3	60'0	59'8	59'5	59'0	58'6	62'40
66'4	66'7	66'5	66'5	66'0	65'5	64'8	64'2	63'7	62'5	62'0	61'2	60'6	59'8	63'40
67'7	68'3	68'4	68'6	68'5	67'6	67'0	66'0	65'6	64'6	64'0	63'4	63'2	62'4	65'17
70'5	71'0	71'0	71'0	70'4	69'6	69'4	68'7	68'5	67'6	67'2	66'5	66'5	65'6	67'74
69'2	69'2	69'4	69'2	68'7	68'6	68'0	67'6	67'0	66'0	65'5	64'8	64'2	63'5	67'32
67'0	67'4	67'6	67'4	66'6	66'2	65'7	65'1	64'7	64'1	64'0	63'5	63'4	63'0	65'65
68'4	68'2	68'0	67'5	67'1	66'6	66'4	66'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	68'0	67'6	67'0	66'6	66'6	66'3	66'77
73'8	74'2	74'6	74'4	73'6	73'0	72'5	72'0	71'5	71'0	70'8	70'0	69'0	69'0	71'10
71'8	72'0	72'2	72'0	71'5	71'3	70'7	70'2	70'0	69'2	68'6	68'2	67'6	67'2	70'37
74'0	74'4	74'6	74'6	74'0	73'4	73'0	72'4	72'0	71'4	71'0	70'8	70'3	70'0	71'49
74'5	74'6	74'8	75'2	74'8	74'5	74'2	73'8	73'5	73'0	72'6	72'3	72'0	71'5	72'77
76'7	77'2	77'0	76'5	75'8	75'2	75'0	74'5	74'1	73'0	72'5	72'0	71'5	71'0	73'87
69'5	69'0	69'0	68'2	67'6	67'0	66'5	66'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	60'3	60'4	60'2	60'0	59'7	59'2	66'81
65'2	65'0	64'7	64'5	64'4	64'0	64'0	63'8	63'5	63'1	63'0	62'5	62'0	61'7	62'95
70'3	70'5	70'5	70'5	69'8	69'4	68'6	68'0	67'4	66'7	66'5	66'0	65'6	65'0	66'90
73'3	73'8	73'9	73'8	73'0	72'5	72'1	71'9	71'4	70'6	70'4	69'6	69'3	68'7	70'36
76'5	77'0	77'0	76'5	76'0	75'5	75'0	74'7	74'7	73'9	73'0	72'5	71'9	71'5	73'59
76'0	76'2	76'6	76'8	75'8	75'4	75'0	74'7	74'5	74'0	73'6	73'5	73'2	72'5	75'81
74'0	74'0	74'0	73'5	73'0	73'0	72'7	72'5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	73'3	73'0	72'7	72'4	72'0	71'7	72'93
76'4	76'8	77'0	77'0	76'4	76'0	75'4	75'0	74'4	74'0	73'7	73'2	73'0	72'4	74'46
79'0	79'5	79'5	79'5	78'7	78'2	78'0	77'6	77'2	77'0	76'2	75'4	74'8	74'6	77'10
71'21	71'43	71'45	71'27	70'77	70'34	69'95	69'50	68'96	68'38	67'99	67'55	67'14	66'69	69'10

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
Mean Galtin. Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	568'5	568'0	570'0	571'6	565'0	554'8	557'4	561'5	562'5	563'2	565'1	579'5
2	561'0	571'4	563'2	554'8	552'8	550'0	567'2	563'0	564'4	571'0	576'5	576'0
3	557'5	570'2	567'8	559'4	561'0	571'0	577'8	572'0	574'2	561'1	578'8	579'0
4	554'6	542'6	560'9	568'9	569'0	570'0	574'2	582'0	584'0	580'0	583'0	586'0
5	—	—	—	—	—	—	—	—	—	—	—	—
6	561'5	570'8	556'0	561'0	555'2	554'0	537'5	568'2	567'0	573'2	584'0	593'2
7	569'0	570'0	558'0	550'0	560'8	562'0	560'6	581'0	580'4	571'8	569'2	573'2
8	571'4	576'2	568'8	567'5	566'0	561'8	560'5	579'2	572'0	578'4	586'0	581'0
9	568'0	569'0	568'0	564'4	554'0	557'3	561'2	564'6	565'0	562'4	569'8	582'6
10	574'6	570'2	571'0	568'3	564'0	564'2	559'0	566'4	565'3	563'4	570'8	559'4
11	582'2	575'4	558'6	558'8	565'5	573'5	551'0	547'2	536'5	562'0	579'5	576'0
12	—	—	—	—	—	—	—	—	—	—	—	—
13	571'4	570'8	577'2	579'2	573'5	558'8	558'4	563'8	578'4	587'0	590'0	580'2
14	575'2	566'8	569'2	568'4	565'0	568'2	571'8	577'4	589'0	592'6	575'0	590'0
15	586'2	587'8	584'6	578'0	569'2	575'0	580'4	589'0	583'0	589'0	594'0	596'0
16	585'6	586'0	588'0	577'0	563'5	576'0	580'6	583'0	593'0	586'5	591'0	590'8
17	587'4	585'0	583'5	573'0	579'0	576'0	580'0	593'2	593'0	599'4	598'2	593'2
18	582'2	582'0	572'0	572'8	562'0	566'2	567'0	591'8	592'2	600'8	614'2	578'0
19	—	—	—	—	—	—	—	—	—	—	—	—
20	580'6	583'0	582'0	570'0	557'0	570'6	576'2	579'4	580'6	576'0	580'0	580'4
21	579'2	567'8	572'8	573'9	571'7	571'5	572'2	568'8	572'0	579'0	574'8	577'0
22	572'0	569'8	567'6	566'0	561'5	561'2	568'0	571'5	580'5	588'0	584'8	581'2
23	585'4	587'2	580'4	559'5	564'5	565'5	574'0	572'0	571'5	572'0	577'5	581'0
24	581'2	580'0	576'2	569'8	553'0	563'5	571'8	575'6	565'7	562'0	575'2	586'0
25	582'4	566'0	573'8	562'7	557'0	565'4	576'5	581'0	596'5	577'2	580'4	586'0
26	—	—	—	—	—	—	—	—	—	—	—	—
27	578'4	580'0	568'6	592'0	552'0	551'0	562'0	564'0	573'4	584'0	569'0	575'0
28	578'6	578'5	571'0	575'7	568'6	568'2	578'7	578'5	582'0	584'0	585'0	583'2
29	573'4	573'0	575'5	565'0	549'8	562'5	542'5	572'0	582'0	590'0	575'8	563'6
30	549'5	557'0	570'0	564'0	548'2	552'0	561'8	556'2	571'4	581'8	556'4	592'0
31	574'0	571'8	554'8	568'5	545'8	540'4	541'6	568'2	587'0	584'6	591'0	594'0
Hourly Means	573'71	573'20	570'83	567'04	561'28	563'58	565'66	572'91	576'76	578'79	581'30	581'98

TEMPERATURE OF THE BUJARIAN MAGNET.												
1	71'5	75'5	76'1	77'2	78'2	78'7	78'8	79'2	79'4	79'6	79'5	79'3
2	73'8	74'3	74'8	75'4	75'8	76'5	76'6	76'6	77'0	76'8	77'0	77'0
3	71'8	72'4	73'2	74'2	75'2	75'5	75'5	75'6	75'8	76'0	75'9	76'0
4	69'8	70'5	71'2	72'0	73'0	74'0	75'0	75'5	76'0	76'8	77'5	77'5
5	—	—	—	—	—	—	—	—	—	—	—	—
6	74'0	74'5	75'0	75'9	76'2	76'2	76'4	76'8	77'3	78'3	79'4	79'5
7	72'8	72'4	72'8	73'3	74'0	74'7	74'8	75'0	75'4	75'4	76'0	76'3
8	70'4	70'0	70'0	70'0	70'2	71'0	71'2	71'8	72'6	74'2	75'1	75'6
9	72'0	72'5	73'2	73'8	74'8	75'3	75'3	75'0	74'8	75'2	75'6	76'4
10	75'3	76'4	77'5	78'6	80'2	82'0	83'2	83'2	83'2	83'8	84'5	85'0
11	78'0	78'4	78'6	79'0	80'0	81'4	81'7	82'5	82'3	81'5	81'2	81'4
12	—	—	—	—	—	—	—	—	—	—	—	—
13	72'7	73'0	73'7	74'4	74'4	74'6	74'6	74'6	75'0	75'4	75'8	76'2
14	69'5	69'6	70'3	70'4	70'8	70'8	70'8	70'7	70'7	71'0	70'9	70'5
15	65'1	64'8	65'4	66'0	66'4	66'7	66'8	67'0	67'0	67'2	67'4	68'0
16	64'0	61'8	65'4	65'8	66'2	66'5	66'7	66'9	67'2	67'5	67'7	68'0
17	63'7	64'4	65'8	67'0	68'0	68'5	69'0	69'2	69'2	70'6	71'0	71'1
18	65'6	66'5	67'4	68'2	69'0	70'0	70'2	71'0	71'5	72'1	72'4	72'6
19	—	—	—	—	—	—	—	—	—	—	—	—
20	72'0	71'7	72'0	72'4	73'0	74'2	74'6	75'2	75'6	76'0	76'6	77'0
21	72'2	72'3	73'4	74'5	75'0	76'0	76'8	77'0	77'4	77'6	77'6	77'6
22	72'9	72'5	72'5	72'7	73'0	73'4	73'9	74'2	74'5	75'0	75'5	75'6
23	71'5	72'2	73'0	73'8	74'6	75'0	75'5	76'0	76'5	77'0	77'3	77'4
24	73'7	73'7	73'5	73'2	73'0	73'6	73'0	72'9	72'7	73'2	73'3	73'5
25	70'6	71'4	71'8	72'0	73'7	74'5	74'9	75'5	76'4	76'7	77'3	77'4
26	—	—	—	—	—	—	—	—	—	—	—	—
27	71'6	72'2	72'6	73'0	74'8	75'0	75'0	74'9	75'5	75'7	75'9	76'0
28	70'5	71'2	71'5	72'5	73'0	73'7	74'7	75'0	75'5	76'0	76'5	76'2
29	73'0	74'0	74'5	75'4	76'1	77'4	78'4	78'7	79'2	80'3	80'4	80'0
30	77'0	77'5	77'7	78'5	79'0	79'6	79'8	80'5	81'2	81'8	82'2	82'0
31	76'3	76'0	75'6	76'0	76'4	77'2	77'8	77'6	77'8	78'5	79'0	79'0
Hourly Means	71'64	72'03	72'51	73'15	73'84	74'52	74'85	75'11	75'41	75'86	76'24	76'39

\* Four minutes late.

HORIZONTAL FORCE.  
One Scale Division = 0.00087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
582.4	568.8	556.2	560.5	563.0	565.5	568.8	565.0	565.0	545.0	558.0	557.2	564.27
561.5	566.0	554.0	562.5	549.0	555.5	563.0	548.0	552.2	554.3	555.0	563.0	560.76
584.2	571.0	563.0	552.2	547.0	530.2	534.3	582.8	568.2	549.8	550.5	554.0	563.33
596.2	594.4	571.2	571.4	587.6	581.4	—	—	—	—	—	—	572.50
—	—	—	—	—	—	561.5	568.0	559.0	561.8	566.4	554.0	—
571.4	563.5	565.2	556.8	556.6	551.2	561.0	557.0	560.2	561.4	561.0	564.5	563.10
572.0	572.4	561.8	560.1	560.0	558.5	558.0	565.0	564.8	566.4	567.2	564.4	565.69
568.0	570.0	569.0	573.2	560.3	570.0	567.0	561.0	565.0	562.3	567.5	566.5	569.77
579.2	575.4	570.8	568.8	568.2	563.8	563.4	568.4	566.0	570.2	566.6	571.4	567.40
561.8	565.0	554.0	561.4	559.0	563.0	564.8	590.8	561.7	566.0	570.2	580.0	566.80
564.0	559.0	554.4	551.2	556.2	57.0	—	—	—	—	—	—	562.06
—	—	—	—	—	—	558.0	560.4	567.6	562.0	579.0	574.4	—
574.5	576.0	569.8	562.8	563.6	567.0	567.2	568.0	563.0	557.0	548.0	550.2	568.62
585.0	582.0	580.6	579.0	581.0	581.0	560.0	593.7	592.0	588.4	587.2	575.4	578.91
589.0	587.0	585.0	583.2	582.0	580.4	579.3	586.4	585.0	585.8	586.4	588.0	584.57
587.3	580.0	579.3	578.8	585.8	583.6	583.4	587.0	592.0	562.5	577.4	584.0	582.69
581.0	579.0	579.2	582.6	583.6	581.7	583.4	587.0	587.0	580.5	581.8	581.0	581.50
573.5	571.4	578.0	581.5	581.0	580.8	—	—	—	—	—	—	578.74
—	—	—	—	—	—	571.0	577.0	552.0	581.5	574.8	577.0	—
579.0	575.5	562.5	572.0	568.0	565.0	570.0	572.4	570.6	571.0	568.2	570.4	573.35
572.5	572.0	572.5	571.0	573.2	568.4	556.2	550.0	562.2	563.7	575.0	570.0	579.43
579.8	577.8	579.6	578.8	581.8	580.9	582.0	581.0	582.0	578.0	559.7	577.0	575.56
582.0	581.4	575.1	571.0	575.0	575.0	579.2	573.5	574.5	576.0	577.5	579.0	575.42
586.0	589.0	563.0	576.0	575.0	571.0	568.0	—	—	—	—	—	572.91
569.0	570.5	573.2	571.0	572.0	572.4	—	—	—	—	—	—	574.77
—	—	—	—	—	—	577.0	576.3	579.4	575.2	576.3	577.2	—
571.0	582.0	563.2	561.2	563.6	566.4	561.0	573.2	578.6	582.2	578.0	579.0	569.87
572.4	575.0	575.2	577.4	578.2	580.0	576.0	588.0	581.4	577.0	576.0	576.0	578.23
569.0	561.4	555.8	562.0	563.5	565.0	567.2	568.5	568.0	562.9	570.0	566.0	566.98
555.8	556.0	561.0	569.0	563.9	518.0	550.0	560.0	566.0	567.0	561.5	568.2	562.07
563.0	569.0	552.8	571.8	563.5	567.0	560.8	574.2	570.0	566.2	576.0	574.0	568.00
575.91	573.91	567.29	569.60	569.28	567.25	566.55	571.71	570.29	568.11	569.68	571.08	571.16

TEMPERATURE OF THE BIFILAR MAGNET.

79.5	79.3	79.0	78.3	77.7	77.4	77.0	76.6	76.2	75.5	75.0	74.5	74.2	73.7	73.13
77.0	77.0	77.0	77.2	77.2	76.5	76.0	75.2	74.7	74.0	74.0	73.4	72.6	72.0	71.49
75.9	76.0	76.0	75.8	75.0	74.0	73.8	73.2	73.0	72.2	71.6	70.8	70.4	70.0	73.86
77.5	77.5	77.5	77.5	76.5	76.4	76.2	75.8	—	—	—	—	—	—	74.93
—	—	—	—	—	—	—	76.0	75.7	75.3	74.5	74.3	73.9	73.0	76.32
79.4	79.5	79.3	78.5	77.8	77.2	76.9	76.3	75.7	75.0	74.5	74.2	73.9	73.0	76.32
76.0	76.3	76.3	76.0	75.0	74.8	74.6	73.8	73.1	72.3	72.0	71.8	71.6	71.2	73.97
75.1	75.6	75.6	75.8	76.2	75.9	75.3	74.8	74.2	73.8	73.6	73.2	72.6	73.0	73.05
75.6	76.4	76.4	77.0	77.4	77.2	76.8	76.6	76.0	75.8	75.8	75.5	75.2	75.0	75.35
81.5	85.0	85.0	84.0	83.4	82.5	81.6	81.0	80.7	80.2	79.7	79.0	78.6	78.2	80.87
81.2	81.4	81.4	81.4	81.2	80.4	80.5	80.2	80.0	—	—	—	—	—	79.18
—	—	—	—	—	—	—	—	76.8	76.5	75.8	74.6	73.9	73.0	79.18
75.8	76.2	76.2	76.0	75.5	75.0	74.7	74.2	73.8	72.7	72.1	71.5	71.0	71.0	74.09
70.9	70.5	70.5	69.6	69.0	68.6	68.2	67.6	67.0	66.7	66.5	66.0	65.5	65.2	69.00
67.4	68.0	68.0	68.0	67.5	67.0	66.6	66.4	66.0	65.4	65.0	64.6	64.4	63.6	66.26
67.7	68.0	68.0	68.5	68.2	67.3	67.1	66.8	66.2	65.5	65.0	64.6	64.1	63.8	66.35
71.0	71.1	71.0	70.8	70.2	69.6	69.1	68.5	68.0	67.4	67.0	66.6	66.2	65.6	68.23
72.4	72.6	72.6	72.7	72.6	72.0	71.5	71.1	70.9	—	—	—	—	—	70.65
—	—	—	—	—	—	—	—	72.0	72.0	71.5	71.3	70.9	70.6	70.65
76.6	77.0	77.0	77.4	77.0	76.5	76.0	75.5	75.0	74.5	74.0	73.6	73.0	72.2	74.46
77.6	77.6	77.6	77.5	76.7	76.2	75.7	75.6	75.2	74.0	74.2	73.8	73.4	73.2	75.35
75.5	75.6	75.6	75.5	75.2	74.8	74.5	74.6	73.0	73.0	72.5	72.3	72.0	71.5	73.61
77.3	77.4	77.4	77.4	77.3	77.0	76.5	76.0	75.7	75.4	75.1	74.6	74.5	74.0	75.35
73.3	74.5	74.5	73.4	73.4	73.2	73.0	73.0	72.9	72.5	71.8	71.4	71.0	70.6	72.77
77.3	77.4	77.4	77.5	77.5	77.2	76.6	76.4	—	—	—	—	—	—	74.81
—	—	—	—	—	—	—	—	74.7	74.0	73.6	73.2	73.2	73.0	73.80
75.9	76.0	76.0	75.7	75.0	74.3	74.0	73.5	73.0	72.6	72.0	71.4	71.0	70.6	73.80
76.5	76.2	76.2	76.3	76.2	75.8	75.4	75.0	74.6	74.5	74.5	73.6	73.4	73.3	74.37
80.3	80.4	80.4	80.0	79.8	79.6	79.0	79.1	78.5	78.5	78.1	78.0	77.7	77.2	77.92
82.2	82.0	82.0	81.5	80.8	80.8	80.4	80.0	79.2	78.5	78.0	77.5	77.3	77.0	79.57
79.0	79.0	79.0	79.2	78.5	77.4	76.8	76.5	75.6	75.0	74.3	73.8	73.2	72.4	76.38
76.24	76.39	76.37	76.14	75.60	75.13	74.79	74.31	73.85	73.37	72.96	72.49	72.16	71.76	74.19

\* Fifteen minutes late.

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	576'2	573'4	562'4	557'2	560'2	547'0	563'0	572'0	575'5	591'0	586'5	587'0
2	—	—	—	—	—	—	—	—	—	—	—	—
3	580'0	580'8	592'0	565'0	556'0	555'0	565'6	576'0	583'0	678'0	579'0	576'2
4	571'5	569'0	564'0	561'0	553'5	556'0	562'0	571'4	576'3	571'8	576'8	573'8
5	570'0	568'0	558'2	552'2	554'2	559'2	566'4	575'8	580'0	571'2	593'6	564'0
6	573'0	576'4	564'0	545'0	564'0	569'8	567'2	566'0	570'4	568'5	561'2	590'0
7	531'6	558'0	557'6	549'0	556'0	556'5	560'5	577'0	562'5	572'1	577'0	579'5
8	561'8	554'0	553'5	547'0	542'5	549'8	564'0	575'5	582'5	588'5	583'3	571'0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	557'0	556'0	568'2	571'2	566'0	556'0 <sup>a</sup>	553'0	562'2	566'4	573'0	574'2	571'8
11	582'5	578'0	572'0	571'2	566'0	568'8	576'4	575'8	592'8	591'2	568'6	584'0
12	584'0	582'2	573'6	552'0	545'2	566'2	572'0	581'5	601'5	587'0	591'2	567'5
13	575'8	537'8	560'5	562'5	549'0	561'8	572'0	581'0	589'0	585'2	585'2	583'0
14	576'2	576'5	552'0	545'0	537'5	557'5	571'2	580'0	568'0	566'5	560'0	582'0
15	558'8	561'0	564'5	564'6	551'0	551'0	556'5	570'0	569'2	578'2	579'2	581'0
16	—	—	—	—	—	—	—	—	—	—	—	—
17	579'5	581'0	575'0	572'4	566'6	554'4	555'4	568'0	578'5	586'0	591'6	591'2
18	583'4	584'2	577'0	570'0	568'0	566'2	558'5	577'2	587'5	587'2	590'5	583'0
19	582'4	592'5	585'0	574'8	579'0	579'4	576'2	587'0	592'6	600'0	581'4	586'0
20	589'0	582'0	577'8	568'5	574'0	586'5	583'2	588'5	596'5	596'5	591'6	589'0
21	571'4	580'0	586'0 <sup>b</sup>	568'0	571'0	572'5	576'5	579'2	577'3	576'2	578'8	595'6
22	585'0	574'0	577'0	565'4	566'0	569'4	578'0	580'8	581'8	601'4	582'5	581'0
23	—	—	—	—	—	—	—	—	—	—	—	—
24	589'0	589'2	588'8	578'5	570'7	568'8	570'0	582'0	572'0	583'0	591'0	602'2
25	582'0	582'4	578'2	571'0	562'0	563'4	573'0	573'0	580'0	589'0	594'2	605'2
26	583'8	586'5	584'5	570'8	565'8	566'5	575'0	583'8	586'5	587'5	588'0	584'2
27	577'0	580'5	576'0	573'0	568'0	568'0	572'5	585'0	601'4	581'0	589'8	631'6
28	576'3	578'5	576'0	572'0	567'8	566'6	569'2	587'5	592'2	590'8	614'8	577'8
29	576'2	573'2	561'0	554'5	568'5	574'0	570'0	568'2	578'1	589'6	583'5	593'0
30	—	—	—	—	—	—	—	—	—	—	—	—
31	580'5	575'6	571'2	566'8	567'0	563'0	561'0	571'0	579'0	579'2	580'4	576'7
Hourly Means	575'15	574'26	571'38	563'41	561'37	563'59	568'01	576'82	581'63	583'98	583'73	581'98

TEMPERATURE OF THE REDULAR MAGNET.												
1	72'0	73'0	74'0	74'4	75'4	76'0	76'0	76'5	77'0	77'2	77'2	77'4
2	—	—	—	—	—	—	—	—	—	—	—	—
3	71'0	71'5	72'2	73'0	73'7	75'0	75'8	77'0	77'7	78'7	79'0	79'0
4	73'0	73'4	74'1	75'2	76'0	77'4	78'5	79'2	79'7	81'0	81'4	81'8
5	76'5	77'0	77'6	78'5	79'5	80'7	81'5	82'2	82'6	83'3	83'8	83'8
6	78'7	78'3	77'7	79'2	80'6	81'4	81'7	81'8	82'2	82'4	82'7	82'7
7	76'8	77'6	76'4	77'0	77'4	78'3	79'4	80'0	81'0	81'5	81'5	82'0
8	75'5	75'5	75'5	75'0	75'0	75'0	75'5	76'2	76'5	77'0	77'0	77'0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	73'0	72'3	72'4	72'5	73'4	74'1	74'5	75'0	75'7	76'5	77'2	77'4
11	69'3	70'0	70'5	71'2	72'3	73'0	73'6	74'0	74'4	74'8	75'3	75'5
12	70'0	70'4	70'7	71'6	73'0	74'2	75'3	75'8	76'4	77'3	77'8	78'4
13	75'0	75'0	74'8	74'8	76'2	77'0	78'0	78'7	78'9	78'5	78'8	79'0
14	76'7	77'5	75'2	75'9	76'9	77'3	77'4	77'5	78'0	78'5	78'5	79'0
15	73'0	73'5	74'1	75'0	76'0	77'2	77'5	78'2	78'7	79'6	80'0	80'4
16	—	—	—	—	—	—	—	—	—	—	—	—
17	71'5	72'0	72'5	72'8	73'6	74'4	74'6	74'6	74'8	75'0	75'3	75'4
18	68'2	68'2	68'5	69'4	69'5	69'9	69'8	69'8	70'0	70'4	70'7	71'0
19	65'8	66'2	66'4	66'6	66'5	67'4	67'8	68'5	69'0	69'5	69'5	69'5
20	67'5	67'4	67'2	67'0	67'2	67'1	67'5	68'0	68'4	68'4	68'6	68'7
21	67'0	67'4	68'0	68'6	69'7	71'0	71'7	72'0	72'5	73'2	73'5	74'2
22	70'6	70'6	70'6	70'4	70'5	71'0	71'5	71'8	72'3	72'6	72'6	72'8
23	—	—	—	—	—	—	—	—	—	—	—	—
24	68'5	69'0	69'5	70'4	71'2	72'0	72'3	72'4	72'5	72'6	72'7	73'1
25	66'6	67'0	68'0	69'4	70'7	71'4	71'8	72'4	72'7	73'8	74'0	74'5
26	69'4	69'5	70'7	71'4	72'0	72'6	73'0	73'5	74'0	74'8	75'0	74'7
27	69'6	70'0	70'5	72'0	72'8	74'2	75'0	75'0	75'6	75'8	75'8	75'0
28	71'0	70'8	70'8	71'0	71'5	72'4	73'0	73'6	74'6	75'6	76'0	75'8
29	71'9	72'0	72'5	73'2	74'0	75'0	76'2	76'2	75'7	75'8	75'3	75'0
30	—	—	—	—	—	—	—	—	—	—	—	—
31	73'2	72'5	73'8	74'5	75'4	76'0	76'6	77'5	78'1	78'9	79'2	79'2
Hourly Means	71'59	71'83	72'08	72'60	73'46	74'28	74'83	75'28	75'71	76'26	76'48	76'61

<sup>a</sup> Fourteen minutes late.

<sup>b</sup> Five minutes late.

<sup>c</sup> Ten minutes late.

e, 1'63.

HORIZONTAL FORCE.													
One Scale Division = 0.00087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
586'5	587'0	587'0	587'0	587'0	587'0	587'0	587'0	587'0	587'0	587'0	587'0	587'0	572'00
579'0	576'2	561'8	570'2	569'0	569'2	570'2	572'0	573'0	580'2	578'8	577'2	569'0	571'94
576'8	564'0	567'8	571'0	571'5	571'0	567'0	570'0	568'2	568'0	571'0	572'0	572'0	568'48
593'6	564'0	556'5	560'0	563'9	564'2	563'0	567'0	573'0	578'0	577'5	577'2	568'42	568'42
561'2	590'0	565'0	567'5	570'0	519'5	567'7	561'4	567'2	489'1	538'4	536'0	558'63	558'63
577'0	579'5	561'5	562'5	562'0	568'2	566'2	548'0	547'8	559'5	535'8	522'5	554'25	554'25
583'3	571'0	577'6	562'2	565'0	562'8	562'4	571'0	—	—	—	—	—	566'03
—	—	—	—	—	—	—	—	—	—	—	—	—	—
574'2	571'8	560'2	561'4	566'8	573'0	571'0	571'8	571'5	572'0	577'0	580'0	584'0	568'65
568'6	584'0	572'2	578'6	569'5	574'0	564'8	577'2	579'0	580'0	583'5	583'0	583'5	577'57
591'2	567'5	570'0	564'0	561'0	549'0	555'5	556'0	567'0	561'2	552'0	560'2	566'0	568'74
585'2	588'0	571'0	569'5	568'0	551'2	560'8	543'0	542'2	497'4	539'4	563'2	572'8	563'61
560'0	582'0	572'4	569'2	575'0	540'3	552'8	554'5	555'2	563'5	555'0	578'2	560'6	562'50
579'2	581'0	610'2	564'4	555'0	564'0	560'2	551'0	—	—	—	—	—	561'23
—	—	—	—	—	—	—	—	—	—	—	—	—	—
591'6	591'2	576'6	565'5	585'4	584'8	565'0	573'0	576'6	582'2	582'0	580'0	576'0	576'12
580'5	583'0	581'2	581'0	565'6	564'0	577'2	570'0	584'5	585'2	585'0	583'8	582'0	577'82
581'4	586'0	582'5	581'2	582'5	574'0	585'0	586'2	588'2	589'2	590'8	587'0	588'2	585'26
591'6	589'0	580'2	586'0	586'2	587'2	588'0	588'8	588'4	587'8	588'4	585'5	586'0	585'25
578'8	595'6	575'2	582'2	581'0	583'8	585'5	583'0	585'0	582'8	582'0	579'9	580'0	579'70
582'5	581'0	582'5	572'5	577'0	579'5	579'0	579'0	—	—	—	—	—	580'36
—	—	—	—	—	—	—	—	—	—	—	—	—	—
591'0	602'2	577'2	568'0	568'0	569'0	564'0	574'0	592'8	581'0	580'6	582'2	578'0	578'60
594'2	605'5	589'0	570'5	560'2	557'0	563'2	578'7	585'2	582'5	581'5	578'6	583'5	577'78
588'0	584'2	586'0	581'6	578'0	577'8	568'8	563'2	579'4	568'2	577'8	577'5	575'4	580'0
589'8	601'6	561'0	565'0	569'0	570'0	572'8	582'5	584'5	590'6	585'0	587'0	571'2	582'0
614'8	577'8	560'4	574'0	578'0	587'5	561'0	564'0	571'0	575'0	567'4	579'6	567'4	567'8
583'5	593'0	573'0	574'5	575'0	572'0	577'0	582'8	—	—	—	—	—	574'86
—	—	—	—	—	—	—	—	—	—	—	—	—	—
580'4	576'7	572'0	571'0	572'0	568'0	569'0	572'2	573'0	573'2	574'4	580'2	576'2	572'84
—	—	—	—	—	—	—	—	—	—	—	—	—	—
583'73	584'98	574'83	570'27	570'26	568'65	569'24	586'46	571'73	568'42	573'55	574'25	573'34	572'41
—	—	—	—	—	—	—	—	—	—	—	—	—	—
77'2	77'4	77'5	77'0	76'1	75'7	75'7	75'5	74'3	73'6	73'2	73'0	72'2	71'5
79'0	79'0	78'7	78'5	77'6	77'2	76'8	76'4	75'8	75'0	74'5	74'2	73'8	73'2
81'4	81'8	82'0	81'6	81'2	80'5	80'2	79'5	79'0	78'7	78'5	78'0	77'8	76'9
83'8	83'8	83'8	83'5	83'4	83'0	82'7	82'5	82'1	81'4	81'0	80'5	80'0	80'5
82'7	82'7	82'6	82'6	82'4	81'8	81'5	80'6	79'8	79'2	78'7	78'0	77'6	77'3
81'5	82'0	81'8	81'2	80'5	80'0	79'6	79'0	78'8	78'0	77'8	77'2	76'6	76'2
77'0	77'0	77'0	76'5	76'5	76'2	75'8	75'6	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
77'2	77'4	77'4	77'3	75'8	74'1	73'8	73'0	72'5	72'2	71'7	71'2	70'4	69'5
75'3	75'5	75'5	75'2	74'5	73'5	73'0	72'8	72'2	71'4	71'1	71'0	70'5	70'2
77'8	78'4	78'0	77'4	76'6	76'5	76'0	75'7	75'4	75'0	74'7	74'5	74'4	74'2
78'8	79'0	79'0	79'0	78'5	78'0	77'6	77'5	76'7	76'4	75'8	75'4	75'0	75'4
78'5	79'0	79'0	78'8	78'0	77'8	77'6	76'6	76'0	75'0	74'5	74'0	73'4	76'84
80'0	80'4	80'4	80'2	79'6	79'0	78'7	78'5	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
75'3	75'4	75'2	74'8	74'0	73'2	72'5	72'0	71'5	70'8	70'2	69'8	69'2	68'8
70'7	71'0	71'0	70'9	70'2	70'0	69'3	68'7	68'4	67'8	67'8	67'6	67'0	66'6
69'5	69'5	69'5	69'0	69'0	68'6	68'6	68'5	68'2	68'0	67'7	67'9	68'0	67'6
68'6	68'7	68'6	68'8	68'8	68'7	68'6	68'4	68'4	68'9	68'0	67'8	67'5	67'2
73'5	74'2	74'0	74'0	73'6	73'3	73'3	72'6	72'4	72'0	71'7	71'5	71'5	71'0
72'6	72'8	72'5	72'4	72'0	71'9	71'7	71'6	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
72'7	73'1	73'4	73'2	72'8	72'0	71'4	70'5	70'0	69'2	69'0	68'4	67'7	67'2
74'0	74'5	74'5	74'0	73'5	73'0	72'6	72'2	71'8	71'5	71'0	70'6	70'4	69'8
75'0	74'7	74'7	74'0	73'8	73'6	72'8	72'2	72'0	71'2	71'0	70'6	70'2	70'0
75'8	75'0	75'3	75'0	74'6	74'2	73'8	73'5	72'6	72'1	72'0	71'8	71'7	71'5
76'0	75'8	75'8	75'6	75'6	75'4	75'0	74'5	74'1	74'0	73'7	73'2	73'0	72'6
75'3	75'0	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
79'2	79'2	79'2	78'3	77'7	77'4	77'0	76'7	76'3	76'0	75'6	75'2	75'0	74'3
—	—	—	—	—	—	—	—	—	—	—	—	—	—
76'48	76'63	76'61	76'29	75'78	75'33	74'95	74'52	73'88	73'39	73'06	72'71	72'34	71'91
—	—	—	—	—	—	—	—	—	—	—	—	—	—

TEMPERATURE OF THE BIFILAR MAGNET.

77'2	77'4
79'0	79'0
81'4	81'8
83'8	83'8
82'7	82'7
81'5	82'0
77'0	77'0
77'2	77'4
75'3	75'5
77'8	78'4
78'8	79'0
78'5	79'0
80'0	80'4
—	—
75'3	75'4
70'7	71'0
69'5	69'5
68'6	68'7
73'5	74'2
72'6	72'8
—	—
72'7	73'1
74'0	74'5
75'0	74'7
75'8	75'0
76'0	75'8
75'3	75'0
—	—
79'2	79'2
76'48	76'63

HORIZONTAL FORCE.													
One Scale Division = .000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1.63.													
Mean (Gottin- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
SEPTEMBER.	1	576.0	572.2	566.0	569.6	564.0	566.5	571.5	571.0	576.0	576.5	576.0	570.7
	2	574.5	570.4	561.0	555.4	558.5	562.2	568.2	572.2	575.2	583.0	577.0	573.2
	3	572.0	567.0	559.0	552.0	547.3	552.0	561.8	573.2	581.0	590.2	589.6	585.2
	4	528.0	544.2	561.2	551.4	547.0	541.4	546.2	558.0	571.4	579.4	576.3	579.0
	5	575.2	537.8	535.4	575.2	522.5	541.0	538.0	548.0	567.0	624.0	585.0	548.0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	575.2	574.0	568.5	560.8	556.0	552.0	551.0	561.0	569.2	573.0	573.2	568.4
	8	565.8	571.5	551.0	547.5	532.5	526.0	548.5	557.0	575.2	585.0	573.2	568.2
	9	574.0	577.0	569.3	569.0	565.2	561.4	563.0	568.8	577.2	587.4	585.8	590.0
	10	584.0	585.2	583.0	574.4	568.5	568.2	572.2	589.0	592.0	591.8	592.0	587.0
	11	525.8	578.8	556.4	571.0	568.0	543.0	535.0	580.0	578.0	594.0	569.0	582.0
	12	572.0	574.8	575.0	541.0	544.0	557.0	567.0	571.0	583.2	576.0	578.8	580.0
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	575.2	551.0	550.0	549.0	551.0	549.0	557.4	566.4	576.2	574.5	576.8	568.4
	15	575.0	570.0	569.5	558.2	561.9	559.2	569.6	575.2	583.0	591.6	583.0	576.4
	16	592.0	586.2	579.8	581.2	583.6	585.6	586.6	586.5	592.0	597.0	594.0	592.7
	17	595.4	595.0	594.2	587.0	574.0	572.5	580.0	584.2	595.0	601.0	596.2	598.0
	18	606.2	597.5	596.6	591.2	586.6	582.9	587.0	591.0	601.0	606.5	602.0	600.0
	19	603.0	596.5	593.4	591.0	578.0	575.0	583.0	581.2	594.0	599.2	588.0	593.2
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	600.0	596.5	586.5	576.0	572.2	577.0	583.6	594.2	606.4	586.6	590.5	602.0
	22	544.4	488.7	456.1	467.7	468.8	525.9	545.4	596.1	603.5	626.3	639.0	580.0
	23	593.6	592.8	587.5	577.2	568.2	572.0	574.0	584.4	593.0	589.0	590.4	612.4
	24	588.9	585.8	573.9	566.2	564.4	561.8	568.5	574.4	586.4	603.4	593.4	589.4
	25	598.4	591.2	589.4	580.9	579.4	578.4	595.9	593.8	601.4	604.2	606.4	606.2
	26	606.4	599.4	594.4	591.6	578.2	583.6	583.8	595.2	603.2	605.2	605.9	614.2
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	611.8	608.0	608.4	602.6	598.8	598.8	600.0	608.6	609.6	606.6	610.8	612.6
	29	611.8	608.6	604.0	601.4	596.8	596.0	600.1	600.6	603.6	606.6	601.4	606.6
	30	608.6	606.1	603.6	594.0	590.6	588.8	590.6	598.1	603.6	608.6	617.6	616.8
Hourly Means	581.01	577.93	572.89	568.21	564.38	565.08	570.42	580.08	588.55	594.61	594.19	588.48	

TEMPERATURE OF THE BILAR MAGNET.													
SEPTEMBER.	1	75.6	73.8	74.1	75.4	76.4	77.3	78.8	79.5	80.0	80.4	80.6	80.7
	2	76.5	76.0	76.0	77.0	77.6	78.3	78.8	79.7	80.5	81.0	80.2	81.0
	3	77.2	77.0	77.0	76.7	76.7	77.0	77.0	77.2	77.2	77.2	77.0	76.8
	4	74.8	75.3	75.7	76.2	76.2	76.5	76.8	77.0	77.5	78.0	78.2	78.0
	5	75.8	76.4	76.5	77.5	78.0	78.5	78.5	78.2	78.4	78.5	78.8	78.7
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	74.2	75.0	76.0	77.5	78.3	78.9	79.4	80.6	81.6	81.9	82.1	82.0
	8	75.0	75.4	75.1	75.9	75.8	76.0	76.1	76.1	76.2	76.0	75.6	75.0
	9	67.2	67.4	68.0	68.6	69.0	69.6	69.5	69.4	69.4	69.5	69.6	69.6
	10	66.8	66.8	67.5	68.6	69.0	69.6	69.6	69.8	69.9	70.3	70.5	70.7
	11	68.5	69.0	69.6	70.6	71.4	72.2	73.0	73.6	74.4	75.2	75.0	75.4
	12	72.5	73.4	74.4	75.5	76.4	77.4	78.2	76.8	76.4	75.8	75.6	75.8
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	74.2	74.2	74.5	75.2	76.6	77.8	78.2	78.8	79.4	79.8	79.7	79.6
	15	73.0	72.5	73.0	73.2	73.0	72.8	72.2	72.0	72.0	72.4	72.4	72.4
	16	66.0	66.0	66.2	67.0	67.7	68.1	68.2	68.4	68.6	69.0	69.0	69.4
	17	65.8	65.6	65.4	65.2	65.3	65.5	65.7	66.0	66.4	66.4	66.4	66.0
	18	64.1	64.0	64.0	64.8	65.9	66.5	67.0	67.5	68.0	68.5	68.6	68.8
	19	64.2	64.0	64.4	65.5	66.3	67.5	68.4	69.0	69.7	70.4	71.0	71.4
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	65.5	65.0	64.5	64.2	65.1	64.5	64.8	65.2	65.4	66.0	66.4	66.5
	22	64.4	64.6	64.7	64.0	63.5	63.8	64.3	64.5	65.2	66.0	66.5	66.5
	23	61.4	61.4	62.2	62.8	64.0	65.2	67.4	67.5	68.2	6. 9	69.4	70.2
	24	68.0	68.0	68.0	68.0	68.0	68.1	68.3	68.1	68.2	68.2	68.0	67.7
	25	63.8	63.0	63.0	62.6	62.4	62.4	62.4	62.4	62.4	62.6	62.6	62.0
	26	60.0	60.0	60.5	61.4	62.0	62.7	63.0	63.4	63.2	63.5	63.5	63.5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	56.8	56.4	56.8	57.4	58.1	59.0	59.4	59.8	60.4	61.2	62.0	62.2
	29	60.5	60.5	60.8	62.4	62.4	63.6	64.4	64.6	65.2	65.8	65.8	65.6
	30	63.0	63.0	63.5	64.4	65.5	65.9	66.4	66.9	67.7	68.2	68.5	68.0
Hourly Means	68.07	68.10	68.42	69.10	69.61	70.18	70.61	70.86	71.21	71.57	71.65	71.67	

12h.	Sc. Div.
571.4	571.4
571.2	571.2
585.6	585.6
560.4	560.4
562.0	562.0
—	—
568.0	568.0
572.0	572.0
585.8	585.8
580.0	580.0
578.0	578.0
576.4	576.4
—	—
566.0	566.0
581.0	581.0
589.9	589.9
594.0	594.0
597.2	597.2
592.0	592.0
—	—
605.5	605.5
558.5	558.5
587.6	587.6
596.7	596.7
607.9	607.9
596.2	596.2
—	—
589.4	589.4
600.6	600.6
—	—
80.6	80.6
81.0	81.0
76.7	76.7
78.0	78.0
78.5	78.5
—	—
81.8	81.8
74.4	74.4
69.6	69.6
70.9	70.9
75.5	75.5
75.8	75.8
—	—
80.0	80.0
72.6	72.6
69.0	69.0
66.0	66.0
68.6	68.6
71.3	71.3
—	—
66.8	66.8
66.4	66.4
70.2	70.2
67.3	67.3
62.0	62.0
63.5	63.5
—	—
62.0	62.0
65.5	65.5
67.8	67.8
71.61	71.61

HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H.F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.												
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
571'4	567'2	571'2	573'2	571'6	567'8	569'2	574'0	569'0	568'4	571'2	574'5	571'03
571'2	582'4	571'0	575'6	574'8	576'1	574'6	571'0	572'0	572'0	571'2	572'0	571'57
585'6	583'0	583'2	585'0	591'0	581'0	591'0	572'0	546'0	556'0	542'0	536'3	570'10
560'4	566'0	558'0	567'0	564'3	573'0	568'0	574'8	546'2	530'0	546'2	569'4	558'95
562'0	343'2	554'5	557'6	557'0	558'2	—	—	—	—	—	—	—
—	—	—	—	—	—	570'6	573'8	672'2	572'0	572'2	573'4	561'95
568'0	567'0	564'8	568'2	562'4	565'0	557'8	549'2	546'4	550'0	558'8	558'0	562'66
572'0	571'8	575'0	578'0	577'8	579'0	581'0	576'6	579'0	579'0	576'9	573'0	567'62
585'8	579'0	582'2	584'0	585'0	584'0	583'6	583'0	581'5	581'0	583'0	584'2	578'10
580'0	577'8	586'0	—	586'5	590'0	584'5	588'0	569'0	568'2	566'0	596'8	581'87
578'0	578'0	580'0	560'2	541'6	564'8	563'2	570'5	560'0	531'4	579'4	570'8	564'95
576'4	576'2	573'0	581'8	580'0	580'2	—	—	—	—	—	—	—
—	—	—	—	—	—	577'2 <sup>b</sup>	578'5	534'0	566'0	577'5	574'0	570'61
566'0	565'5	566'8	573'5	566'4	563'0	574'0	567'0	558'9	566'6	555'8	585'0	564'73
581'0	583'4	583'8	585'8	586'4	587'0	587'2	587'5	587'5	586'5	585'5	586'2	579'77
589'9	592'8	590'0	581'0	589'3	583'0	586'5	592'0	591'2	587'4	582'2	599'8	584'55
594'0	579'0	591'2	595'0	595'2 <sup>c</sup>	597'0	597'2	600'0	597'0	596'6	602'4	603'9	592'54
597'2	594'6	595'8	595'8	601'0	593'8	594'8	595'2	597'0	598'6	600'2	603'5	596'62
592'0	592'8	591'0	590'0	591'4	593'0	—	—	—	—	—	—	—
—	—	—	—	—	—	593'0	598'8	592'0	590'0	595'5	596'2	591'01
605'5	586'0	591'0	601'0	589'0	568'0	610'0	541'2	548'5	533'0	506'0	571'8	580'10
558'5	567'5	561'2	560'0	558'0	561'5	565'0	591'6	587'0	593'7	594'0	595'4	560'26
587'6	590'0	591'2	593'4	571'4	584'4	580'0	593'2	587'8	581'4	587'4	590'4	586'61
596'7	589'4	592'6	595'6	594'2	596'6	595'0	596'6	596'0	598'4	601'6	599'0	588'00
607'9	601'6	598'4	606'2	600'4	602'6	602'4	598'8	598'4	585'4	603'4	607'4	597'56
596'2	609'4	609'2	607'5	606'4	606'4	—	—	—	—	—	—	—
—	—	—	—	—	—	611'9	510'4	611'9	609'4	612'4	616'4	602'86
589'4	601'9	610'6	611'1	608'1	610'8	610'6	610'8	612'8	615'3	614'0	613'2	607'72
607'6	606'4	609'4	607'6	608'6	603'6	602'8	605'8	608'6	609'8	609'8	608'6	605'24
600'6	593'6	594'0	603'6	612'1	600'6	590'8	583'6	591'0	590'4	599'6	603'4	599'47
583'88	582'63	583'69	585'63	583'46	583'48	585'73	583'61	578'46	577'56	580'70	587'06	580'78

TEMPERATURE OF THE BIFILAR MAGNET.												
80'6	79'8	79'4	79'2	78'6	78'3	78'0	77'5	77'2	77'0	76'8	76'7	77'92
81'0	80'6	80'4	80'0	79'5	79'0	78'8	78'7	78'4	78'2	78'0	77'5	78'86
76'7	76'5	76'5	76'4	76'5	76'5	76'2	75'5	75'5	75'5	75'5	75'0	76'51
78'0	77'8	77'5	77'5	77'4	77'0	77'0	76'5	76'5	76'4	76'2	76'0	76'83
78'5	78'5	78'1	77'7	77'0	76'8	—	—	—	—	—	—	—
—	—	—	—	—	—	75'5	75'5	75'2	75'0	75'0	74'5	77'13
81'8	81'3	81'0	80'5	79'8	79'4	79'0	78'0	77'0	76'0	76'0	75'5	78'87
74'4	74'0	73'6	73'0	72'3	71'5	71'0	70'6	70'0	69'0	68'6	68'0	73'52
69'6	69'0	69'0	68'5	68'3	68'0	67'8	67'4	67'2	67'0	67'0	66'8	68'43
70'9	70'5	70'5	—	70'0	69'5	69'3	69'0	69'0	68'8	68'5	68'5	69'29
75'5	75'2	75'0	74'7	74'7	74'2	74'2	73'6	73'2	73'2	73'0	72'8	73'22
75'8	76'0	75'6	75'2	75'0	74'6	—	—	—	—	—	—	—
—	—	—	—	—	—	75'7	75'7	75'5	75'3	75'0	74'2	75'49
80'0	80'0	79'8	79'5	79'2	78'6	78'3	77'5	77'0	75'7	74'5	73'5	77'57
72'6	71'5	71'2	70'8	70'5	69'5	69'0	68'5	68'1	67'5	67'0	66'8	71'00
69'0	68'5	68'4	68'0	68'0	67'7	67'5	67'0	67'0	66'5	66'2	65'8	67'63
66'0	65'6	65'6	65'3	65'0	65'0	64'8	64'6	64'6	64'5	64'4	64'2	65'39
68'6	68'5	68'0	67'6	67'0	66'8	66'2	65'6	65'5	65'1	64'8	64'5	66'50
71'3	71'2	70'6	70'1	69'9	69'4	—	—	—	—	—	—	—
—	—	—	—	—	—	68'4	68'2	68'3	68'2	67'4	66'4	69'38
66'4	66'3	65'7	65'4	64'8	64'4	64'2	63'5	63'0	62'6	62'2	62'0	64'75
66'5	66'1	66'0	65'5	65'0	64'5	64'0	63'5	63'0	62'8	62'8	62'0	64'15
69'4	70'2	70'0	69'7	69'5	69'6	69'6	69'4	69'0	69'0	69'0	68'4	67'59
68'0	67'2	66'6	66'6	66'4	66'3	65'8	65'4	65'0	64'8	64'5	64'2	66'96
62'6	62'0	62'0	61'9	61'6	61'4	61'2	61'0	60'8	60'5	60'4	60'4	61'95
63'5	63'4	63'0	62'6	62'6	62'2	—	—	—	—	—	—	—
—	—	—	—	—	—	57'5	58'0	58'0	57'5	57'3	57'0	61'22
62'0	61'8	61'4	61'2	61'0	60'8	60'5	60'5	60'7	60'6	60'6	60'6	60'05
65'8	65'2	65'0	64'6	64'4	64'0	63'8	63'6	63'4	63'1	63'2	63'0	63'77
68'5	67'6	67'4	67'2	67'0	66'8	66'4	66'0	65'5	65'2	65'0	65'0	66'16
71'65	71'32	71'05	70'75	70'42	70'07	69'60	69'24	68'98	68'65	68'42	68'05	69'97

\* Missed.

<sup>b</sup> Forty minutes late.

<sup>c</sup> Four minutes late.



HORIZONTAL FORCE.													
One Scale Division = .000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
OCTOBER.	1	598'0	594'0	588'0	576'0	583'0	577'5	589'0	585'2	587'6	590'2	593'5	
	2	598'0	595'0	585'0	586'8	582'8	581'6	580'6	593'6	593'2	602'0	601'5	
	3	608'2	601'2	594'0	587'5	587'2	589'8	597'3	591'6	605'0	610'6	612'2	
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	608'0	604'2	594'2	593'0	588'8	585'2	590'2	594'0	596'2	600'5	603'2	603'0
	6	605'2	601'0	596'0	586'9	583'5	578'8	587'5	588'0	591'1	601'0	601'0	602'2
	7	598'0	599'0	591'2	570'5	556'0	539'0	558'0	567'0	584'5	591'0	588'0	588'8
	8	557'5	513'0	546'0	538'1	553'0	558'0	559'2	565'8	574'4	585'5	582'4	582'0
	9	578'0	583'4	585'0	579'8	567'2	562'4	565'5	567'0	575'0	573'0	587'5	589'0
	10	582'0	574'0	558'0	555'2	572'8	583'0	583'2	584'4	584'6	594'0	599'0	601'0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	611'5	596'0	593'0	599'0	595'0	593'0	593'0	590'0	587'9	595'0	600'0	593'8
	13	601'4	590'0	596'7	593'5	587'0	584'5	585'0	595'2	599'8	603'2	599'2	594'2
	14	611'5	606'2	603'0	598'7	598'8	599'2	604'2	606'2	608'4	605'8	603'8	603'1
	15	614'0	611'2	605'8	599'8	595'6	594'5	596'8	603'0	606'0	606'0	609'5	614'5
	16	614'5	609'4	605'4	596'8	596'2	600'2	602'0	609'0	607'8	610'0	605'4	605'0
	17	612'8	610'0	606'0	604'0	601'0	602'0	605'0	611'7	616'0	626'0	620'0	618'4
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	629'0	628'0	623'5	619'0	611'0	604'0	600'0	604'2	613'0	630'0	629'0	610'5
	20	620'2	624'6	611'0	603'2	603'3	591'0	601'2	605'5	605'4	611'2	613'4	620'6
	21	614'0	612'2	613'7	611'0	608'5	602'4	609'0	608'2	619'8	613'2	629'0	613'0
	22	620'2	618'2	599'0	591'0	584'0	581'3	587'0	585'6	595'3	618'8	614'2	613'5
	23	624'0	621'5	612'2	609'0	605'0	603'5	607'7	610'0	623'5	623'2	628'0	616'5
	24	625'0	625'4	618'0	611'0	610'5	611'0	617'0	619'0	606'2	619'2	621'2	625'8
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	626'5	623'0	622'0	613'8	609'0	604'2	603'8	610'4	620'0	612'4	614'8	616'2
	27	617'0	616'2	610'6	603'2	599'0	593'8	594'2	600'2	603'4	606'2	606'8	612'0
	28	620'2	618'5	615'0	605'8	601'5	600'0	594'0	601'0	613'2	614'0	618'5	625'0
	29	622'0	614'0	619'0	613'5	608'1	606'0	604'0	606'0	606'2	609'0	613'4	619'3
	30	622'0	617'0	613'8	622'0	612'5	608'0	608'1	608'8	614'0	616'2	620'0	620'0
	31	617'5	624'0	621'0	618'2	616'0	617'2	615'0	620'2	620'0	620'8	627'0	629'0
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	609'49	605'16	600'93	595'79	593'21	591'74	591'13	597'55	602'07	607'09	608'74	608'48	

TEMPERATURE OF THE DIPULAR MAGNET.												
OCTOBER.	1	64'2	63'8	63'5	63'0	63'0	62'8	63'0	63'0	63'0	63'0	62'6
	2	59'0	59'0	58'5	58'5	58'4	58'5	58'8	59'3	59'4	60'0	60'5
	3	55'7	55'2	56'0	57'8	58'4	58'8	59'5	60'0	60'0	60'4	61'1
	4	—	—	—	—	—	—	—	—	—	—	—
	5	56'4	56'2	56'4	58'0	58'4	59'6	60'5	61'2	61'4	62'9	63'5
	6	58'4	58'4	59'0	60'1	60'9	62'1	62'5	63'5	63'9	61'5	64'7
	7	61'0	61'1	62'0	63'5	64'4	65'4	65'6	66'4	66'7	67'2	67'5
	8	66'0	66'0	66'0	66'2	66'4	66'8	67'0	67'0	66'6	66'6	66'6
	9	64'4	64'2	64'0	64'8	66'2	67'0	67'4	67'5	67'0	66'5	65'7
	10	59'0	58'5	58'2	58'0	58'1	58'5	58'7	59'0	59'2	59'6	60'2
	11	—	—	—	—	—	—	—	—	—	—	—
	12	56'8	57'2	58'1	58'8	59'9	60'7	61'0	62'0	62'4	63'2	63'5
	13	61'8	61'6	61'4	61'0	60'6	60'8	60'8	60'4	59'7	59'0	58'6
	14	55'9	55'5	56'0	56'7	57'0	57'6	58'0	58'3	58'4	58'8	59'0
	15	56'8	56'5	56'6	57'0	58'0	58'2	58'4	58'5	58'4	59'0	59'4
	16	56'0	55'6	55'6	55'6	56'3	57'1	57'5	58'1	58'4	58'6	59'3
	17	55'8	55'1	54'8	54'5	54'3	54'6	55'0	55'0	55'0	55'1	55'0
	18	—	—	—	—	—	—	—	—	—	—	—
	19	48'3	48'2	48'7	50'0	51'2	52'0	52'5	52'8	53'0	53'5	54'2
	20	52'6	52'5	52'5	52'3	53'0	53'8	53'4	55'0	55'2	51'8	54'8
	21	51'0	51'2	51'0	50'6	51'7	52'4	52'9	53'4	53'3	53'8	53'5
	22	54'0	53'6	52'7	53'0	53'0	53'0	52'8	52'6	52'4	52'1	52'1
	23	48'2	47'8	47'2	46'8	47'3	47'8	48'4	49'2	49'3	50'0	51'0
	24	50'5	50'5	50'4	51'0	52'3	52'6	53'0	53'5	53'6	54'2	54'7
	25	—	—	—	—	—	—	—	—	—	—	—
	26	49'6	50'0	50'0	50'2	50'8	51'8	53'0	54'2	54'6	55'5	55'8
	27	57'4	57'4	57'0	56'5	56'6	57'4	57'8	58'0	58'2	58'5	58'3
	28	52'8	52'4	52'6	52'4	52'0	52'2	52'2	52'5	54'8	54'0	54'5
	29	52'5	51'5	51'1	51'7	52'5	53'2	53'7	54'0	54'2	54'6	54'6
	30	51'4	51'2	50'6	50'4	50'5	51'0	51'5	51'7	52'0	52'0	52'5
	31	49'0	48'8	48'5	49'0	49'0	49'0	48'7	48'5	48'5	48'2	48'1
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	55'72	55'52	55'50	55'83	56'30	56'84	57'17	57'58	57'69	57'99	58'21	58'00

\* Twenty-five minutes late.

\* Three minutes late.

12h.
593'0
592'0
608'0
—
601'0
576'4
571'2
569'4
574'2
601'0
—
596'6
594'2
607'2
606'2
606'0
615'8
—
603'8
609'2
605'0
616'5
628'2
613'4
—
620'0
612'0
624'0
—
601'26
62'4
61'0
60'7
—
64'0
64'0
67'5
66'0
64'9
60'2
—
63'2
58'1
58'7
58'8
60'0
58'8
—
53'6
54'0
54'0
51'0
51'1
54'6
—
55'3
57'0
54'4
54'0
51'6
48'0
—
57'78

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1' 63.

1' 63.		HORIZONTAL FORCE.											Daily and Monthly Means.	
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.		23h.
593'5	590'6	593'0	602'5	601'8	598'0	599'0	601'0	602'0	604'2	600'0	601'0	605'0	583'5	593'48
591'5	596'2	592'0	568'8	576'1	569'3	575'0	572'0	570'0	562'6	575'5	586'0	589'0	590'8	594'31
592'2	607'0	608'0	607'7	607'0	601'0	601'0	595'0	605'0	607'2	605'6	609'0	607'3	610'0	602'68
603'2	603'0	601'0	599'5	599'0	599'2	597'8	599'4	599'8	600'8	602'4	603'8	605'5	605'0	598'90
601'0	602'2	576'4	593'2	594'0	594'2	592'6	594'2	581'2	591'2	594'1	599'0	596'6	600'0	593'00
588'0	588'8	571'2	571'4	545'5	529'0	535'0	474'0	476'5	539'0	537'4	545'0	583'0	586'2	560'17
582'4	582'0	569'4	576'2	579'0	580'0	588'0	588'0	574'0	566'5	579'0	590'0	588'0	589'6	570'07
587'5	589'0	574'2	567'0	565'0	547'5	557'8	553'5	534'5	547'2	530'0	558'4	562'8	591'0	566'74
599'0	601'0	601'0	603'0	602'2	604'0	600'2	602'0	600'5	602'8	582'5	585'0	611'6	606'0	590'50
600'0	593'8	596'6	595'8	592'2	601'5	599'0	599'2	595'8	600'8	598'8	601'4	601'0	605'0	597'26
599'2	601'4	594'2	591'8	595'6	602'0	598'2	601'2	601'5	605'0	605'0	605'4	607'0	607'0	598'33
603'8	603'1	607'2	604'0	606'2	607'2	607'0	606'2	607'0	607'5	610'0	610'0	609'2	613'0	605'93
609'5	614'5	606'2	596'0	591'0	595'0	625'0	581'0	593'5	599'0	605'0	610'0	610'2	610'5	603'75
605'4	605'0	606'0	601'0	609'0	606'2	604'0	604'2	605'2	599'2	602'8	606'2	608'0	613'0	605'40
620'0	618'4	615'8	615'0	616'0	618'2	615'2	620'0	626'4	625'8	627'2	626'2	628'4	630'0	616'67
629'0	610'5	603'8	603'6	605'8	596'5	608'0	600'8	605'0	609'0	610'4	612'0	617'2	617'0	612'05
613'4	620'6	609'2	613'8	611'0	615'0	614'0	613'8	613'0	616'0	617'0	619'0	618'0	611'2	612'11
629'0	613'0	605'0	619'0	619'0	601'5	590'0	596'0	611'0	610'0	614'2	610'4	594'6	620'6	610'35
614'2	613'5	616'5	617'0	618'0	619'0	610'0	615'2	612'3	615'4	617'5	604'2	610'0	616'4	607'61
622'2	628'0	628'2	625'0	623'8	622'2	620'0	616'2	613'0	614'0	617'2	621'8	623'2	624'0	618'09
621'2	625'8	613'4	611'6	606'4	636'0	616'2	610'1	621'2	621'0	620'0	620'0	626'0	627'0	618'26
614'8	616'2	620'0	620'2	620'4	623'0	615'5	614'4	617'0	616'0	615'0	612'0	614'0	614'8	615'77
606'8	612'0	612'0	616'0	611'8	612'5	611'0	613'0	617'0	616'2	616'0	615'6	616'3	619'6	610'11
618'8	625'0	624'0	623'0	614'0	620'0	615'8	616'0	613'8	620'0	614'2	620'0	622'2	624'6	614'98
613'4	619'3	619'0	622'8	621'2	618'8	616'2	617'4	614'4	618'2	622'0	622'2	622'8	622'0	615'74
620'0	620'0	621'5	616'8	607'2	602'0	608'6	615'0	616'0	620'0	621'2	620'0	620'0	626'0	615'70
627'0	629'0	632'8	630'2	631'5	629'0	630'2	630'0	620'5	616'0	622'0	625'0	624'0	624'8	623'45
608'74	608'48	601'36	604'26	602'99	602'03	602'20	599'21	598'01	601'87	602'33	605'13	608'18	610'65	602'27

TEMPERATURE OF THE BIFILAR MAGNET.

63'0	62'6	62'4	62'1	61'8	61'5	61'0	60'5	60'0	59'7	59'7	59'4	59'0	59'0	61'83
60'5	61'1	61'0	60'8	60'5	59'5	59'4	58'6	58'2	57'5	57'1	57'0	56'5	56'2	58'89
61'1	61'2	60'7	60'2	60'0	60'0	59'8	59'5	59'1	58'7	58'8	58'7	58'7	58'4	58'52
63'5	64'0	64'0	63'5	63'0	62'7	62'2	61'8	61'5	60'8	60'3	60'1	59'7	59'0	60'71
61'7	61'5	64'0	63'7	63'5	63'2	63'2	63'0	62'6	62'3	62'0	61'6	61'5	61'2	62'26
67'5	67'7	67'5	67'3	67'2	67'5	67'4	67'1	67'0	66'9	66'9	66'7	66'5	66'0	65'95
66'6	66'0	65'6	65'5	65'1	65'2	65'0	64'8	64'8	64'5	64'5	64'5	64'5	64'5	65'65
65'7	64'9	64'0	63'5	63'1	63'0	63'0	62'6	62'0	61'7	61'5	61'0	61'0	59'5	64'02
60'2	60'5	60'2	60'2	59'4	59'4	58'8	58'8	58'8	58'8	58'8	58'8	58'8	58'8	58'53
63'5	63'4	63'2	63'2	63'0	62'8	62'6	62'6	62'6	62'5	62'0	62'0	61'8	61'6	61'54
58'6	58'2	58'1	57'3	57'0	56'6	56'7	56'6	56'5	56'2	56'5	56'6	56'6	56'2	58'51
59'0	58'7	58'1	58'1	57'8	57'5	57'2	56'8	56'5	56'6	56'6	57'0	57'0	56'6	57'32
59'4	59'0	58'8	58'4	58'0	57'5	57'5	57'0	56'8	56'6	56'6	56'4	56'2	56'0	57'57
59'3	59'5	60'0	60'2	60'5	60'6	60'5	60'3	60'0	59'2	58'8	58'2	57'6	56'6	58'34
55'0	54'3	53'8	54'0	53'7	53'4	53'0	52'6	52'6	52'6	52'6	52'6	52'6	52'6	52'82
54'2	53'6	53'6	53'4	53'2	53'0	53'0	52'7	52'7	52'5	52'2	52'4	52'4	52'6	52'15
54'8	54'5	54'0	53'5	53'2	53'7	52'5	52'4	52'1	52'0	52'0	52'0	51'6	51'4	53'07
53'5	53'7	54'0	54'1	54'5	55'0	54'7	54'3	54'0	53'7	54'0	54'0	54'2	54'2	53'30
52'1	51'9	51'0	51'0	50'9	50'6	50'4	50'0	49'6	49'2	48'6	47'8	48'0	48'0	51'18
51'0	51'3	51'1	51'3	51'5	51'4	51'0	51'0	51'0	50'6	50'3	50'3	50'2	50'0	49'75
54'7	54'8	54'6	54'4	54'2	53'6	53'4	53'0	53'0	53'0	53'0	53'0	53'0	53'0	52'22
53'8	54'6	55'3	55'5	55'6	56'0	56'0	56'0	56'0	56'5	56'8	57'0	57'1	57'3	54'38
58'3	57'3	57'0	57'2	56'5	56'7	56'4	55'7	55'0	54'6	54'4	54'2	54'0	53'4	56'48
54'5	54'5	54'4	54'0	53'5	52'7	52'7	52'7	52'2	52'2	52'2	52'0	52'6	52'2	52'89
54'6	54'6	54'0	53'7	53'7	53'4	53'2	53'0	53'0	53'0	52'0	51'8	51'8	51'2	53'00
52'5	51'6	51'6	51'6	51'6	51'0	50'6	50'4	50'2	50'0	49'8	49'8	49'5	49'2	50'90
48'2	48'1	48'0	48'0	48'0	47'9	47'9	47'7	47'7	47'7	47'7	47'7	47'7	47'7	49'10
58'21	58'00	57'78	57'62	57'41	57'20	57'00	56'72	56'46	55'97	55'83	55'75	55'66	55'36	56'70

HORIZONTAL FORCE													
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1°.63.													
Mean (duration) gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
NOVEMBER.	2	621'2	622'0	608'0	621'8	616'0	603'0	603'5	604'6	607'8	608'0	600'0	
	3	617'4	613'8	611'2	600'0	607'5	600'2	605'0	606'0	605'5	605'8	612'5	
	4	614'0	613'5	609'2	603'4	601'5	602'0	606'6	607'0	612'0	610'0	616'0	
	5	618'0	618'5	613'8	607'0	602'0	598'0	600'0	601'2	606'2	612'0	611'3	
	6	625'0	620'0	615'0	609'2	603'0	600'2	600'0	604'2	609'2	610'2	617'8	
	7	622'0	622'2	619'2	614'4	607'6	604'2	605'2	607'0	601'0	599'0	601'8	
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	617'8	616'8	612'0	607'4	605'6	600'0	595'0	599'0	600'0	608'0	611'5	611'2
	10	609'0	612'0	609'0	607'5	605'0	602'0	599'0	600'0	606'0	608'0	607'0	609'2
	11	614'0	612'2	608'0	603'0	600'5	596'5	598'0	599'2	605'4	609'0	602'0	608'2
	12	616'6	615'0	611'0	605'2	602'2	598'4	598'0	601'2	609'4	615'4	616'2	617'2
	13	618'3	620'0	616'2	610'4	603'8	603'0	603'2	610'5	614'0	622'4	614'4	616'2
	14	621'8	620'8	616'2	611'0	601'1	597'0	595'0	599'2	604'0	608'0	611'0	614'0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	621'2	620'2	614'0	611'0	608'0	606'2	608'6	608'0	615'0	620'0	618'0	612'0
	17	620'0	618'4	611'0	613'0	613'0	620'3	602'0	593'2	603'0	597'2	597'4	591'4
	18	604'5	602'0	598'0	592'2	581'8	592'0	591'0	594'2	595'5	597'9	597'9	598'6
	19	604'0	602'8	599'0	595'4	592'4	598'0	603'2	608'9	617'0	615'0	611'6	617'0
	20	620'2	620'8	616'0	609'0	603'5	602'0	609'0	604'0	609'0	615'3	617'0	608'0
	21	621'4	619'2	614'8	608'8	602'5	598'5	602'6	607'1	610'0	614'0	618'0	619'2
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	628'0	626'2	622'0	617'5	612'8	610'0	611'0	616'2	621'2	626'0	628'4	631'0
	24	626'5	624'0	620'0	613'4	604'8	600'2	607'0	610'8	617'2	625'8	629'2	628'2
	25	625'2	625'0	627'0	621'2	624'5	615'0	624'5	621'4	632'0	639'2	643'5	641'0
	26	652'2	655'5	652'0	619'0	623'4	612'2	604'0	611'2	625'5	621'0	617'5	609'5
	27	612'0	633'8	630'2	628'0	635'2	627'5	620'0	617'0	625'0	636'0	637'0	636'0
	28	634'5	631'0	626'0	621'2	617'9	614'0	604'0	611'5	614'0	607'5	616'5	614'4
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	628'5	638'6	639'5	621'0	630'8	634'0	634'6	625'0	625'4	632'8	635'5	635'8
	Hourly Means	621'85	620'93	616'73	610'96	608'38	605'38	605'32	607'22	611'61	614'54	615'56	614'48
TEMPERATURE OF THE BIFILAR MAGNET.													
	°	°	°	°	°	°	°	°	°	°	°	°	
NOVEMBER.	2	52'4	52'6	52'8	52'8	53'0	54'1	54'7	55'1	55'3	55'9	56'4	
	3	56'2	56'0	56'0	56'2	56'7	57'4	58'1	58'4	58'6	58'8	58'8	
	4	57'5	57'0	56'2	57'0	57'7	58'0	58'5	58'7	58'9	59'0	59'2	
	5	53'8	53'4	54'0	54'9	55'4	56'4	57'0	57'5	58'2	59'0	59'0	
	6	51'9	51'5	52'0	52'0	52'5	53'2	54'0	54'8	55'2	55'8	56'5	
	7	53'0	53'0	52'5	52'2	53'0	53'6	54'0	54'1	54'4	55'0	55'2	
	8	—	—	—	—	—	—	—	—	—	—	—	
	9	56'6	57'0	57'0	57'0	57'8	58'5	58'7	59'0	59'5	59'6	60'0	
	10	60'0	59'6	59'4	59'0	59'9	60'5	61'0	61'6	61'5	61'9	61'3	
	11	59'4	59'2	59'0	59'0	59'0	59'5	59'6	59'6	59'4	59'6	60'0	
	12	57'5	57'1	57'0	56'7	56'5	56'8	57'0	57'2	57'4	57'8	58'2	
	13	57'4	57'2	56'6	56'6	56'6	56'6	56'6	56'8	56'8	57'2	57'0	
	14	56'0	55'6	55'2	55'0	55'5	55'6	55'8	56'3	56'1	56'6	56'8	
	15	—	—	—	—	—	—	—	—	—	—	—	
	16	54'9	55'1	54'5	54'4	55'2	55'5	55'8	56'0	56'1	56'5	56'5	
	17	55'9	55'7	55'5	56'0	56'6	56'7	56'9	57'2	57'4	57'7	57'7	
	18	57'0	57'0	56'7	56'8	57'2	58'0	59'0	59'8	60'0	59'9	59'4	
	19	57'4	57'0	56'6	56'4	55'8	56'0	56'3	55'6	54'9	54'9	54'6	
	20	50'6	50'4	50'0	50'0	51'0	51'5	51'8	52'2	52'5	53'0	52'8	
	21	52'3	51'6	51'3	50'4	50'6	51'0	51'0	51'5	51'5	52'0	51'3	
	22	—	—	—	—	—	—	—	—	—	—	—	
	23	45'6	45'7	45'3	45'5	46'0	47'0	47'5	48'2	49'0	49'4	49'4	
	24	50'0	50'0	49'8	49'2	49'7	50'3	50'7	51'2	51'0	51'0	51'0	
	25	46'7	46'4	45'0	45'0	43'6	42'2	41'8	41'0	40'3	40'2	39'8	
	26	39'6	38'8	38'2	38'6	39'5	39'6	39'8	40'0	39'6	39'5	39'5	
	27	39'6	39'2	38'6	39'3	39'6	39'7	40'6	41'5	42'0	42'3	42'7	
	28	49'4	49'4	49'4	49'6	49'6	49'6	49'8	49'9	50'5	51'2	51'5	
	29	—	—	—	—	—	—	—	—	—	—	—	
	30	42'5	42'6	43'0	43'0	43'2	43'5	43'5	43'5	43'2	43'3	43'5	
	Hourly Means	52'53	52'32	52'06	52'10	52'45	52'83	53'18	53'47	53'57	53'88	53'92	

12h.	Sc. Div.
—	606'0
—	614'5
—	606'0
—	612'0
—	620'4
—	604'0
—	—
—	611'0
—	606'2
—	609'0
—	616'8
—	617'0
—	615'0
—	—
—	612'6
—	595'2
—	604'2
—	613'2
—	611'0
—	619'0
—	—
—	630'2
—	628'9
—	641'0
—	603'0
—	619'0
—	616'2
—	637'1
—	614'74
—	—
—	56'5
—	59'0
—	59'0
—	58'4
—	56'2
—	55'0
—	—
—	60'1
—	60'8
—	59'7
—	57'7
—	56'2
—	56'6
—	—
—	56'3
—	57'2
—	58'6
—	58'6
—	59'7
—	58'9
—	53'6
—	52'5
—	51'3
—	—
—	48'6
—	50'1
—	39'3
—	40'1
—	44'0
—	51'6
—	—
—	43'0
—	53'66



HORIZONTAL FORCE.												12h.		
One Scale Division = '000087 parts of the H. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'43.														
Mean (Gust- gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.	
DECEMBER.	1	636'6	641'4	638'7	637'2	630'8	627'8	628'2	623'0	630'8	639'0	643'0	641'0	633'2
	2	641'2	641'9	634'0	636'0	633'9	625'1	628'4	630'0	627'5	631'5	630'0	641'5	626'9
	3	628'7	625'5	623'0	618'0	615'9	611'5	613'0	617'0	622'0	625'5	626'2	628'0	627'2
	4	630'0	632'7	632'5	629'0	620'0	617'0	619'0	622'2	628'0	627'0	631'0	632'8	630'0
	5	633'0	631'7	629'0	625'8	620'4	618'2	622'0	622'0	628'8	632'6	630'7	633'7	629'9
	6	—	—	—	—	—	—	—	—	—	—	—	—	—
	7	643'0	639'0	637'6	635'2	629'0	625'8	621'4	622'5	628'4	635'1	640'4	639'4	638'2
	8	635'0	638'2	634'2	630'8	624'8	618'6	615'6	618'0	625'0	635'8	638'2	635'2	628'2
	9	634'8	636'2	634'2	631'0	626'0	622'5	622'0	622'0	625'0	631'5	626'0	628'2	625'0
	10	633'7	629'0	629'0	628'0	620'0	616'0	610'0	610'4	622'0	623'2	622'8	625'0	626'2
	11	636'0	633'2	635'6	631'4	633'0	625'2	618'4	622'5	625'8	631'0	630'6	631'0	629'0
	12	630'4	636'0	637'4	635'0	632'0	629'7	626'5	625'2	631'0	631'0	639'0	631'2	637'4
	13	—	—	—	—	—	—	—	—	—	—	—	—	—
	14	655'0	651'2	652'0	651'4	652'0	647'8	643'6	645'8	648'4	655'0	655'9	646'0	653'5
	15	652'6	647'6	646'5	646'0	642'3	638'3	636'0	641'0	645'0	646'0	647'1	648'0	647'4
	16	649'0	650'0	649'0	647'0	643'0	638'0	638'0	640'0	642'2	643'0	645'2	647'8	647'4
	17	645'0	645'0	642'2	638'4	636'6	635'0	637'3	639'9	643'2	645'2	647'0	645'0	646'1
	18	647'6	646'8	642'6	644'0	641'0	636'2	637'4	638'8	645'5	647'9	642'0	639'8	640'0
	19	643'4	640'4	638'8	635'8	634'4	631'0	627'0	632'5	635'4	638'0	641'0	641'5	642'5
	20	—	—	—	—	—	—	—	—	—	—	—	—	—
	21	649'1	646'8	645'8	644'0	640'0	637'4	639'5	643'0	646'5	648'0	650'0	652'4	652'0
	22	647'0	647'0	646'0	647'0	640'0	638'0	643'5	647'3	651'0	654'2	653'0	654'0	647'8
	23	650'0	656'0	649'8	648'4	643'0	634'0	632'2	637'0	635'2	626'2	623'0	631'1	629'0
	24	640'0	642'5	640'2	635'0	625'0	620'0	622'2	616'6	632'2	633'4	641'5	642'0	640'2
	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	651'0	651'2	637'0	637'0	622'0	627'0	628'0	630'4	635'2	635'4	641'4	640'0	639'2
	27	—	—	—	—	—	—	—	—	—	—	—	—	—
	28	635'8	636'0	632'0	628'2	627'7	622'2	617'6	622'8	626'8	631'5	634'5	633'9	630'7
	29	641'0	639'2	637'8	635'4	629'8	625'6	629'0	629'2	625'0	637'0	639'6	641'6	642'0
	30	638'8	637'0	637'5	636'3	624'3	618'0	620'0	625'0	630'0	633'8	633'5	633'5	633'0
	31	637'0	634'0	631'4	627'8	624'4	621'0	621'0	625'2	632'0	634'7	634'0	637'3	637'0
Hourly Means	640'95	640'67	638'22	636'23	631'20	627'19	626'65	628'82	631'57	636'87	638'06	638'23	636'94	
TEMPERATURE OF THE BIFILAR MAGNET.														
DECEMBER.	1	41'2	40'6	40'0	39'6	39'5	39'8	40'2	40'4	40'5	41'1	41'6	41'8	41'5
	2	43'6	43'8	43'7	41'1	45'0	46'1	46'4	46'6	47'3	48'2	48'6	49'5	50'0
	3	50'8	49'9	48'6	48'3	47'9	48'0	48'2	48'0	47'6	48'0	47'6	47'6	47'6
	4	44'0	44'0	44'0	44'0	44'2	44'6	45'0	45'2	45'5	45'7	46'3	46'5	46'5
	5	47'0	47'0	46'9	46'8	47'2	48'0	48'0	48'4	48'6	49'0	49'2	48'8	48'9
	6	—	—	—	—	—	—	—	—	—	—	—	—	—
	7	43'5	44'0	43'7	43'6	43'7	44'5	45'0	45'4	45'2	45'7	46'2	46'7	46'7
	8	49'6	49'5	48'8	48'5	49'2	49'6	49'4	49'2	49'2	49'4	49'4	49'0	49'0
	9	47'5	47'0	46'7	46'2	46'0	46'6	47'2	48'0	48'0	48'0	48'0	48'0	48'5
	10	45'5	45'5	45'1	44'4	44'5	45'7	46'2	46'7	47'0	48'0	48'8	48'8	48'3
	11	46'0	45'6	45'3	45'7	46'8	47'0	46'3	46'2	45'8	45'6	45'8	45'1	44'8
	12	43'0	42'6	42'0	41'2	40'4	40'4	40'4	40'4	40'2	40'5	40'5	40'7	40'7
	13	—	—	—	—	—	—	—	—	—	—	—	—	—
	14	31'4	31'7	32'0	32'0	32'6	33'0	33'6	34'5	35'4	36'2	36'8	36'5	36'5
	15	34'0	33'5	33'3	33'9	34'9	36'2	36'8	37'5	38'4	39'5	39'7	39'8	40'2
	16	37'9	38'2	37'3	36'7	38'0	39'0	40'0	40'6	41'2	40'7	41'3	41'4	41'6
	17	39'6	39'5	39'0	39'8	40'7	41'8	42'8	43'0	42'6	42'7	42'7	42'6	42'6
	18	38'8	38'7	38'3	38'0	38'2	39'2	40'0	40'8	41'8	42'4	42'6	43'0	43'1
	19	42'2	41'8	41'8	42'0	43'0	43'1	43'4	43'8	43'7	43'7	43'7	43'5	43'5
	20	—	—	—	—	—	—	—	—	—	—	—	—	—
	21	38'5	38'5	38'0	38'0	37'7	38'2	38'9	39'9	40'7	41'5	41'7	41'2	41'0
	22	40'3	40'5	39'5	38'9	35'6	34'6	34'0	33'6	33'6	34'0	35'0	36'0	37'0
	23	38'5	38'0	36'6	36'7	37'3	37'3	37'0	38'0	39'2	40'6	41'3	41'3	42'0
	24	41'8	41'7	41'6	41'4	42'0	43'0	44'0	44'5	44'6	44'8	44'8	44'8	45'0
	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	39'0	39'2	39'0	38'5	39'4	40'4	41'0	41'5	41'4	41'5	41'0	41'5	41'6
	27	—	—	—	—	—	—	—	—	—	—	—	—	—
	28	46'5	46'5	46'0	46'0	46'2	46'5	46'0	45'8	45'6	45'6	45'5	45'3	44'8
	29	43'4	42'8	42'0	41'4	41'5	41'8	42'2	42'0	42'1	42'7	43'1	43'4	43'2
	30	43'8	44'0	44'7	45'2	45'6	46'1	46'7	48'0	47'5	48'0	48'0	47'6	47'2
	31	48'6	48'6	48'5	46'8	47'4	48'0	47'6	48'5	48'5	49'0	49'1	49'1	49'7
Hourly Means	42'51	42'41	42'02	41'83	42'10	42'63	42'93	43'33	43'51	43'93	44'17	44'21	44'29	

\* Christmas Day.



HORIZONTAL FORCE.												
One Scale Division = '00087 parts of the II. F. Increase in Scale Division, corresponding to 1° decrease of Temperature, 1'63.												
Mean Observation Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	636'2	636'0	636'0	635'0	631'0	628'0	627'0	629'2	634'3	638'0	641'0	640'4
2	632'5	638'0	633'2	633'0	629'6	620'0	620'0	622'4	630'8	637'0	636'7	640'9
3	—	—	—	—	—	—	—	—	—	—	—	—
4	641'6	640'8	640'5	631'2	624'8	618'6	619'2	625'0	633'8	639'5	611'0	637'0
5	634'2	638'2	640'4	636'4	624'0	621'0	622'0	621'0	628'0	633'0	635'2	634'0
6	635'8	639'2	640'6	633'0	621'0	614'2	610'6	614'0	619'5	633'5	636'2	638'3
7	635'0	634'2	634'3	629'0	615'0	616'0	616'0	624'0	628'6	635'0	638'0	635'4
8	647'5	645'0	647'0	610'2	630'0	625'2	629'4	637'5	613'0	645'4	647'5	645'2
9	655'0	655'0	653'2	650'0	639'5	637'5	641'2	611'0	648'5	648'0	651'5	652'0
10	—	—	—	—	—	—	—	—	—	—	—	—
11	653'8	652'2	654'0	649'0	636'0	638'8	641'2	647'0	650'0	658'0	657'0	662'0
12	660'5	658'8	653'5	661'0	654'0	642'0	641'5	638'5	646'0	652'0	658'2	658'8
13	646'0	648'0	653'0	647'0	646'0	642'0	643'0	625'2	634'8	635'0	643'0	645'0
14	636'0	638'5	638'0	637'4	631'5	623'0	620'4	627'4	632'2	635'4	630'2	637'2
15	632'0	631'8	632'0	623'2	618'5	614'2	619'5	624'8	626'2	629'5	630'1	630'2
16	627'5	630'2	631'4	629'1	621'6	620'2	619'0	622'5	624'0	629'5	632'1	632'0
17	—	—	—	—	—	—	—	—	—	—	—	—
18	650'0	650'5	648'3	643'0	636'1	633'0	634'0	639'0	642'0	641'0	647'0	645'6
19	647'0	647'0	642'0	634'0	633'5	632'5	636'8	639'3	642'0	646'7	649'0	651'0
20	664'0	648'5	662'0	659'8	647'0	619'4	650'0	650'0	650'5	647'5	642'0	640'0
21	650'4	649'5	642'5	628'0	620'4	629'8	631'0	630'6	635'0	634'5	642'1	640'0
22	651'5	653'0	650'4	658'8	650'2	650'8	650'2	652'5	650'1	655'0	650'5	654'5
23	652'0	655'0	653'2	649'0	643'5	642'0	643'0	646'0	647'0	650'0	648'0	648'0
24	—	—	—	—	—	—	—	—	—	—	—	—
25	648'5	648'0	646'5	644'0	637'5	635'0	637'0	610'0	617'0	650'8	649'2	648'8
26	646'0	646'5	645'2	638'0	630'2	630'0	629'8	633'5	637'5	641'2	642'7	637'9
27	644'0	644'7	645'2	644'0	639'2	638'2	639'2	640'0	642'0	645'2	648'0	649'0
28	650'0	649'0	651'4	649'2	648'0	644'4	644'1	646'4	647'0	648'0	652'0	651'9
29	643'6	643'0	648'1	638'0	618'2	641'0	638'1	641'8	632'0	637'0	637'0	624'0
30	637'5	637'0	637'0	642'0	642'8	630'0	612'0	608'0	636'0	651'0	627'2	621'6
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	644'54	644'52	644'57	640'86	634'58	631'53	630'97	633'45	637'99	642'41	642'78	642'33

TEMPERATURE OF THE BIFILAR MAGNET.												
	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
1	47'5	47'5	47'6	48'4	48'5	48'8	47'8	48'3	47'8	47'5	47'5	47'6
2	46'9	46'9	46'0	45'5	45'8	46'0	46'2	46'3	46'7	47'0	47'2	47'1
3	—	—	—	—	—	—	—	—	—	—	—	—
4	43'0	43'0	43'0	42'8	42'7	43'2	43'6	44'4	45'0	45'5	45'6	45'6
5	47'0	46'8	45'8	44'8	46'0	46'0	44'0	45'4	46'5	47'4	47'2	46'6
6	45'5	45'5	45'1	44'8	45'5	46'1	46'4	46'7	47'0	48'0	48'6	49'0
7	47'4	47'4	46'8	46'0	46'0	46'5	46'3	45'5	44'8	45'0	44'8	44'2
8	37'2	36'9	36'0	36'0	36'0	36'0	35'5	35'0	34'6	34'8	35'1	34'7
9	33'7	33'5	33'2	33'0	33'6	34'5	35'5	35'7	36'0	36'6	37'0	36'0
10	—	—	—	—	—	—	—	—	—	—	—	—
11	28'6	28'7	28'5	28'4	29'9	30'4	29'2	28'5	28'0	28'0	27'6	29'3
12	24'5	24'1	24'8	30'0	31'4	32'4	33'0	33'5	34'5	35'7	36'9	37'2
13	36'0	36'0	35'8	35'9	36'9	39'0	40'5	41'3	42'0	43'2	43'6	43'4
14	45'0	45'4	45'5	45'6	46'2	47'5	48'0	48'4	48'3	48'3	48'3	48'1
15	49'4	49'2	48'6	48'5	48'3	48'8	49'6	50'5	50'5	50'7	50'8	50'6
16	50'5	50'1	49'8	49'0	48'5	48'1	46'1	46'4	46'3	45'5	44'7	44'1
17	—	—	—	—	—	—	—	—	—	—	—	—
18	37'7	38'0	38'0	37'5	38'5	38'7	40'6	41'1	41'4	41'9	42'3	42'5
19	37'4	37'4	37'2	36'4	36'0	35'7	35'5	35'5	35'7	35'8	35'6	35'5
20	33'0	33'2	32'8	33'5	34'4	35'0	35'7	36'0	36'2	36'6	37'0	38'0
21	37'4	38'0	37'4	37'0	36'2	36'4	35'5	35'7	36'0	35'9	35'4	34'6
22	30'5	30'6	30'5	31'0	30'9	31'4	31'7	32'0	32'0	32'5	32'5	32'9
23	32'4	32'9	33'1	33'6	34'7	36'0	37'3	38'5	39'0	39'5	39'8	40'5
24	—	—	—	—	—	—	—	—	—	—	—	—
25	35'8	36'0	35'6	36'3	37'5	38'0	38'5	38'6	39'5	40'2	40'2	40'2
26	41'1	41'5	41'8	42'0	42'7	43'7	44'4	44'7	44'8	44'8	44'6	44'5
27	40'0	40'0	39'5	39'1	38'9	39'0	38'6	39'2	37'8	37'6	37'5	36'8
28	34'6	33'8	33'8	33'5	34'0	35'0	35'9	36'5	37'3	38'4	39'4	39'4
29	39'0	39'6	39'6	39'4	39'8	40'9	41'4	42'0	42'7	43'1	43'0	42'7
30	40'4	40'4	39'5	39'0	40'0	40'9	40'6	40'8	40'8	41'6	40'8	40'5
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	39'44	39'48	39'20	39'12	39'57	40'15	40'28	40'63	40'82	41'17	41'27	41'22

\* Missed.

\* Twenty minutes late.

1° 63.

10 <sup>h</sup> .	11 <sup>h</sup> .
640°4	640°9
637°0	637°0
635°2	634°0
636°2	638°3
638°0	635°4
647°5	645°2
651°5	652°0
657°0	662°0
658°2	658°8
643°0	645°0
630°2	637°2
630°1	630°2
632°1	632°0
645°6	645°6
649°0	651°0
642°0	640°0
642°1	640°0
650°5	654°5
648°0	648°0
649°2	648°8
642°7	637°9
648°0	649°0
652°0	651°0
637°0	634°0
627°2	621°6
642°78	642°33

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
639°2	638°4	641°2	637°9	637°0	636°1	634°0	633°9	635°0	635°0	632°6	636°0	635°35
636°5	633°0	635°8	635°0	633°9	631°0	634°0	633°9	635°0	635°0	632°6	636°0	633°86
637°4	636°0	631°0	631°0	636°0	631°0	640°0	639°0	635°0	635°0	641°0	640°4	633°02
631°3	626°5	613°0	620°2	626°0	631°0	635°2	635°6	632°4	633°0	636°2	635°0	631°62
634°0	633°6	613°7	624°4	628°8	633°0	631°2	631°0	632°1	632°9	633°2	634°0	629°07
631°4	631°2	631°0	636°8	637°1	636°1	638°2	640°0	641°4	643°0	644°6	647°0	633°64
649°3	652°1	651°1	655°1	655°9	654°0	653°8	651°0	654°0	652°0	653°0	652°2	646°64
650°0	648°5	653°0	651°5	648°0	646°2	653°8	656°0	654°4	656°5	656°0	655°8	650°09
664°5	662°2	662°0	661°2	660°4	658°2	654°8	654°8 <sup>b</sup>	656°0	657°3	658°5	661°0	654°57
654°0	644°2	639°2	633°2	648°4	645°4	646°5	651°1 <sup>c</sup>	649°0	650°2	650°0	643°0	649°96
641°8	642°0	642°6	643°3	644°1	642°2	640°0	638°2	638°4	640°0	641°0	640°0	641°32
637°3	636°1	626°1	623°0	628°2	627°4	630°2	630°0	631°5	631°0	635°0	632°8	631°62
630°0	630°0	630°5	631°0	629°0	629°0	629°2	630°0	630°3	631°6	629°0	623°8	627°72
631°1	635°0	635°0	631°3	637°4	637°4	648°2	648°2	649°8	650°4	651°8	651°0	634°53
645°2	646°0	645°2	643°2	642°0	641°6	641°1	642°4	644°0	645°1	646°8	647°0	643°43
652°2	652°8	653°0	656°0	653°3	653°8	656°2	656°6	657°0	653°0	655°0	651°0	648°07
646°5	643°1	645°0	646°4	645°0	642°0	645°0	647°0	647°0	647°4	645°8	642°6	648°06
644°2	646°2	647°8	650°0	649°0	650°0	647°5	649°0	651°0	651°2	649°4	652°2	642°55
651°0	651°5	651°0	651°0	650°4	648°0	650°2	646°8	647°2	650°0	653°2	650°7	651°31
648°0	644°6	641°8	646°0	645°4	643°0	649°6	650°3	651°2	651°2	651°5	652°0	647°97
647°8	647°0	647°8	647°8	645°8	645°0	645°2	645°2	645°0	644°2	645°0	647°0	645°21
632°0	634°0	632°1	633°0	633°0	636°2	638°0	638°0	639°0	639°0	642°0	643°2	637°25
650°0	646°0	646°0	644°2	646°2	648°0	649°8	650°2	649°3	649°0	649°2	649°8	645°68
651°0	653°7	643°0	642°7	641°2	646°0	644°0	638°4	640°0	635°8	640°4	646°8	646°14
642°0	631°4	631°0	630°0	628°2	629°0	631°6	631°4	631°4	633°9	636°1	637°0	636°02
613°0	632°2	645°4	610°0	611°0	622°0	626°0	628°0	629°2	634°0	635°2	637°0	628°38
642°30	641°55	640°13	640°05	640°14	640°33	641°27	642°11	642°25	642°95	644°02	643°94	640°48

47°5	47°6
47°2	47°1
45°6	45°6
47°2	46°6
48°6	49°0
44°8	44°2
35°1	34°7
37°0	36°0
27°6	29°3
36°9	37°2
43°6	43°4
48°3	48°1
50°8	50°6
41°7	44°1
42°3	42°5
35°6	35°5
37°0	38°0
35°4	34°6
32°5	32°9
39°8	40°5
40°2	40°2
44°6	44°5
37°5	36°8
39°4	39°4
43°0	42°7
40°8	40°5
41°27	41°22

TEMPERATURE OF THE BIPOLAR MAGNET.

48°0	47°6	47°4	45°9	45°9	45°6	45°6	45°9	46°4	46°8	47°0	46°9	47°24
49°1	47°6	47°6	47°2	47°0	46°7	46°7	40°2	41°4	42°0	43°0	43°4	45°63
46°2	46°0	46°6	46°5	47°3	47°1	47°0	47°5	48°0	48°0	47°6	47°6	45°53
47°0	47°0	47°0	47°0	47°0	46°7	46°6	46°4	46°2	46°2	46°0	45°6	46°84
49°5	49°0	48°4	47°6	47°0	46°5	46°5	46°5	47°1	47°3	47°3	47°2	47°00
43°6	42°5	41°8	41°6	41°1	40°2	39°5	39°5	39°5	40°4	40°1	38°5	43°29
34°6	34°2	33°8	33°5	33°3	32°5	32°4	32°6	32°9	33°0	33°3	33°5	34°47
36°4	35°7	36°0	35°2	35°2	35°5	29°6	29°2	29°2	29°2	29°0	28°7	33°63
30°5	31°0	31°5	31°3	30°8	30°4	30°2	30°2	30°4	30°4	29°8	29°7	29°61
37°5	37°0	36°4	36°3	35°7	35°6	36°4	36°0	35°7	36°1	36°1	35°8	34°55
43°5	43°2	42°7	42°6	42°5	42°8	43°0	43°2	43°2	44°0	44°6	44°6	41°40
48°8	48°8	48°9	49°4	49°5	49°5	49°5	49°4	49°4	49°5	49°5	49°5	48°18
51°0	51°0	51°4	51°4	51°5	51°5	51°5	51°2	51°2	51°5	51°3	51°0	50°46
43°5	42°9	41°6	40°8	40°3	40°0	31°2	31°6	35°0	35°5	36°3	37°0	42°95
43°0	42°8	42°6	42°5	42°0	41°8	41°2	40°5	40°5	40°0	39°2	39°0	40°55
35°7	35°2	35°3	35°3	34°7	33°5	33°5	33°2	33°0	33°4	33°5	33°0	35°12
38°6	38°5	38°5	38°2	38°4	38°0	38°4	39°0	38°6	38°0	37°6	37°6	36°70
35°4	35°1	34°7	33°6	33°5	33°0	32°8	32°6	32°0	31°5	30°7	30°4	31°57
33°5	33°6	33°0	32°7	32°2	31°8	31°8	31°8	31°7	31°6	31°9	31°9	31°92
41°2	40°7	40°7	40°6	40°5	40°4	34°0	34°3	34°6	35°0	35°5	35°7	37°10
40°5	40°4	40°8	41°3	41°3	40°6	40°6	40°7	40°8	40°9	41°1	41°0	39°43
44°7	44°0	43°3	42°2	42°0	42°0	42°4	41°8	41°0	40°5	40°2	40°0	42°70
37°2	37°0	37°0	36°5	36°5	37°0	37°0	37°0	36°7	35°7	35°2	34°4	37°55
40°4	40°1	40°4	40°6	39°8	39°6	39°4	39°0	38°7	38°5	38°8	38°5	37°73
43°4	43°0	43°2	42°8	42°5	42°0	41°6	40°6	40°4	40°2	40°6	40°6	41°42
40°3	40°0	40°0	38°5	38°5	38°2	35°7	35°7	35°7	36°0	36°4	37°0	39°03
41°62	41°30	41°14	40°81	40°62	40°33	39°60	39°22	39°23	39°32	39°31	39°15	40°17



HORIZONTAL FORCE.													12 <sup>h</sup> .
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° G.													
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	639'3	640'3	637'3	634'3	617'5	633'0	635'6	637'3	637'5	636'3	634'6	633'4	634'7
2	628'5	627'3	628'7	626'5	623'8	622'1	622'7	625'7	628'1	629'3	629'5	629'3	628'6
3	626'0	622'5	612'2	617'8	617'8	620'0	619'2	622'0	623'1	626'8	624'0	629'0	631'5
4	641'6	638'7	632'2	631'8	629'0	629'2	632'0	640'0	641'0	648'2	650'0 <sup>a</sup>	648'2	648'0
5	648'0	648'4	643'5	640'5	637'0	639'0	642'0	650'0	650'3	650'2	650'3	650'0	649'8
6	642'0	634'5	637'0	632'0	609'8	620'0	626'4	626'0	635'0	626'2	633'8	623'6	628'4
7	—	—	—	—	—	—	—	—	—	—	—	—	—
8	639'3	634'0	622'0	620'0	630'8	626'4	622'8	624'2	624'0	630'0	623'1	627'8	631'5
9	633'0	631'0	626'0	618'0	617'0	614'7	617'5	622'0	619'2	616'0	621'0	622'0	623'5
10	633'2	632'5	629'0	626'8	624'6	622'0	621'0	620'0	624'0	622'0	629'0	632'4	630'3
11	636'0	633'9	635'8	626'8	623'0	626'0	624'0	624'3	626'0	630'0	633'8	638'0	632'2
12	640'0	641'0	642'5	636'0	626'0	625'8	625'0	630'2	630'8	628'5	630'2	631'4	633'1
13	640'0	641'2	640'0	640'0	638'3	640'7	636'4	637'0	637'9	640'1	638'8	639'0	640'0
14	—	—	—	—	—	—	—	—	—	—	—	—	—
15	648'8	649'6	642'5	639'3	637'3	639'0	640'1	641'2	643'0	646'0	636'2	639'5	640'0
16	649'0	648'2	631'0	638'0	637'4	635'8	646'0	644'0	649'0	649'0 <sup>b</sup>	647'6	636'0 <sup>c</sup>	637'0
17	644'2	642'4	639'0	631'5	629'2	626'0	631'0	638'4	637'7	639'4	640'0	637'6	637'8
18	640'2	638'0	636'5	641'0	635'7	638'2	642'2	639'2	643'2	633'2	638'5	637'0	637'0
19	632'0	636'3	632'0	627'2	622'1	620'6	623'2	628'8	635'0	636'0	635'0	634'5	635'0
20	634'2	632'0	626'2	625'9	624'1	622'4	625'1	629'8	631'0	633'0	637'5	638'5	636'0
21	—	—	—	—	—	—	—	—	—	—	—	—	—
22	650'1	641'4	618'5	641'0	612'5	628'7	624'0	621'2	625'0	627'0	639'0	634'0	631'2
23	636'0	636'0	630'5	625'0	625'0	620'8	620'8	624'0	636'0	636'5	639'0	642'0	610'8
24	619'5	618'0	641'5	642'2	643'2	633'0	624'2	630'0	610'0	634'6	631'5	633'0	635'1
25	623'5	634'0	635'2	637'4	610'3	625'4	616'8	617'4	613'2	631'1	642'8	630'2	621'8
26	633'4	630'2	628'0	626'4	620'0	619'0	618'9	621'5	622'2	634'0	636'0	624'5	630'0
27	628'0	626'2	626'0	620'2	612'0	616'5	613'8	622'5	623'1	629'9	633'0	631'2	634'0
28	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	636'90	636'98	632'22	631'08	626'39	626'70	627'11	629'86	631'18	633'89	635'72	634'67	631'60

TEMPERATURE OF THE BIFILAR MAGNET.													12 <sup>h</sup> .
	°	°	°	°	°	°	°	°	°	°	°	°	°
1	37'5	37'9	38'4	38'6	38'7	39'0	39'8	41'0	41'8	42'6	43'1	43'3	43'5
2	44'7	44'6	44'6	45'0	45'5	46'5	47'5	48'0	48'3	48'5	48'9	49'0	49'3
3	49'5	49'1	49'0	49'0	49'4	49'4	49'4	49'2	49'0	48'4	47'0	45'8	45'0
4	36'0	35'2	34'6	34'4	34'9	35'4	36'1	37'5	37'9	39'2	39'5	39'5	40'2
5	35'4	35'4	34'5	35'5	36'2	37'0	38'0	39'2	40'0	41'0	41'7	41'6	41'8
6	38'0	38'0	38'5	39'3	40'0	40'3	40'5	41'2	41'8	42'5	43'5	44'4	45'0
7	—	—	—	—	—	—	—	—	—	—	—	—	—
8	43'5	43'5	43'3	43'6	43'9	44'6	45'2	45'5	45'4	45'9	46'0	45'9	46'1
9	46'4	46'2	46'2	46'8	47'2	47'4	47'5	47'4	47'2	47'3	47'6	47'0	47'6
10	44'5	45'9	45'7	45'2	45'5	46'2	46'5	47'1	47'2	47'5	47'5	47'7	48'0
11	43'0	42'5	41'7	41'8	42'4	42'4	43'2	43'7	43'2	43'5	42'8	42'9	43'0
12	41'6	41'6	41'4	42'2	43'2	43'0	43'8	43'3	45'8	46'0	46'0	46'0	45'4
13	41'7	41'6	41'0	41'0	41'2	42'2	42'8	42'9	42'6	42'6	42'6	42'3	42'3
14	—	—	—	—	—	—	—	—	—	—	—	—	—
15	42'4	42'5	42'2	41'4	41'7	42'6	42'9	43'2	43'0	43'0	43'4	44'0	43'5
16	37'5	37'2	36'5	35'7	35'9	36'3	36'2	36'4	37'2	38'4	39'0	39'2	40'2
17	40'2	40'3	40'4	41'0	41'5	42'5	43'2	43'0	44'5	44'5	45'7	45'8	45'8
18	41'2	41'4	41'4	41'5	42'2	43'0	43'8	44'4	44'7	45'5	46'3	46'6	46'4
19	45'7	45'6	45'2	44'8	44'9	45'3	45'7	46'2	46'7	47'5	47'4	47'4	47'8
20	46'0	45'6	45'3	44'9	45'4	45'3	44'8	44'2	44'0	44'2	44'3	44'0	44'2
21	—	—	—	—	—	—	—	—	—	—	—	—	—
22	36'8	36'5	36'2	36'4	37'0	38'8	39'4	40'4	40'6	41'0	40'9	40'3	40'8
23	35'2	34'4	34'5	35'6	36'5	37'1	37'6	38'0	38'4	38'6	39'1	39'8	40'0
24	32'4	32'7	33'0	34'0	35'3	36'7	38'0	39'2	39'8	40'6	40'9	41'0	41'4
25	39'8	39'3	39'0	39'8	41'0	42'0	43'0	43'4	44'0	45'1	45'7	46'0	45'8
26	37'8	37'4	37'2	37'4	40'8	42'1	43'0	43'5	43'8	44'3	43'9	43'4	43'5
27	42'0	42'0	42'0	42'2	42'9	44'4	44'4	44'8	45'4	45'2	45'4	45'0	45'2
28	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	40'78	40'68	40'49	40'71	41'38	42'06	42'60	43'11	43'43	43'87	44'09	44'08	44'25

<sup>a</sup> Five minutes late.

<sup>b</sup> Two minutes late.

<sup>c</sup> Three minutes late.

re, 1' 63.

10h.	11h.
631'6	633'4
629'5	629'3
624'0	629'0
650'0	648'2
650'3	650'0
633'8	623'6
623'1	627'8
621'0	622'0
629'0	632'4
633'8	638'0
630'2	631'4
638'8	639'0
636'2	639'5
647'6	636'0
640'0	637'6
628'5	637'0
635'0	634'5
637'5	638'5
639'0	634'0
639'0	642'0
631'5	643'0
642'8	630'2
636'0	624'5
633'0	631'2
635'72	634'67

HORIZONTAL FORCE.

One Scale Division = .000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
634'7	635'3	635'1	634'3	631'3	633'1	632'5	631'3	635'3	632'6	632'6	631'5	634'25
628'6	629'3	628'2	628'3	627'3	627'5	628'3	631'3	629'3	628'5	628'5	629'3	627'85
631'5	631'0	630'0	631'0	632'6	635'0	633'0	636'0	635'5	628'7	635'2	627'0	626'95
618'0	648'0	646'3	646'0	645'2	648'8	643'2	645'1	646'3	647'0	647'2	647'4	642'22
649'8	647'8	648'0	646'4	646'2	640'1	642'0	643'2	642'4	637'9	639'0	642'0	644'75
628'4	630'0	624'1	610'0	623'1	624'0	—	—	—	—	—	—	629'51
631'5	631'0	627'8	627'0	633'1	614'5	623'0	622'4	623'5	621'8	626'7	627'0	626'40
623'5	631'0	622'0	627'2	628'8	630'3	628'7	628'5	629'2	630'0	631'5	631'3	625'10
630'3	630'0	630'0	632'0	633'0	630'2	630'0	628'8	631'1	641'3	633'8	626'0	628'46
632'2	634'6	637'0	639'2	639'6	639'8	638'0	637'0	637'2	635'9	636'8	639'2	633'50
633'1	633'0	635'8	632'0	633'2	638'5	638'0	638'0	639'0	640'0	641'2	640'3	634'56
640'0	644'4	642'4	641'0	644'0	644'0	—	—	—	—	—	—	641'77
610'0	641'0	641'5	637'0	635'2	634'0	633'8	634'0	639'8	640'5	635'2	644'8	639'93
617'6	641'2	642'0	643'8	643'0	643'2	644'4	643'9	643'8	643'7	645'2	645'0	642'80
637'8	639'6	640'0	637'8	635'8	635'0	636'0	636'0	638'5	639'0	641'5	640'2	637'23
628'5	637'0	636'0	635'0	635'0	631'0	637'5	634'0	636'0	634'5	636'0	635'0	636'95
635'0	634'8	634'5	635'0	634'1	644'2	635'0	637'0	634'2	633'0	633'2	632'8	632'31
636'0	636'8	640'0	641'3	641'0	639'2	—	—	—	—	—	—	637'36
631'2	648'2	645'0	579'8	618'5	625'4	606'4	619'4	620'0	627'0	628'0	633'4	625'74
610'8	639'0	635'4	632'1	639'0	637'9	638'8	643'0	641'4	646'0	639'2	640'0	635'30
637'1	609'0	633'9	628'0	642'4	640'0	625'4	631'0	607'5	623'0	631'0	634'7	630'90
621'8	620'2	618'8	629'0	617'0	611'0	614'0	616'0	619'6	612'2	608'0	629'2	622'25
630'0	626'4	627'0	646'6	632'8	634'8	634'5	634'2	632'1	631'4	633'8	631'6	629'68
634'0	634'2	644'0	634'4	634'5	633'8	—	642'8	644'2	642'0	643'9	651'1	656'04
631'60	633'32	633'95	632'38	634'53	633'14	634'18	635'30	635'16	635'00	636'35	637'57	633'26

43'1	43'3
48'9	49'0
47'0	45'8
39'5	39'5
41'7	41'6
42'5	44'4
46'0	45'9
47'6	47'0
47'5	47'7
42'8	42'9
46'0	46'0
42'6	42'3
43'4	44'0
39'0	39'2
45'7	45'8
46'3	46'6
47'4	47'4
44'3	44'0
40'9	40'5
39'1	39'8
40'9	41'0
45'7	46'0
43'9	43'4
45'4	45'0
44'09	44'08

TEMPERATURE OF THE BIFILAR MAGNET.

43'5	43'6	43'6	43'5	43'3	43'0	43'0	43'1	41'0	41'3	41'4	41'8	41'92
49'3	49'3	48'9	48'6	48'6	49'0	49'9	49'7	49'8	49'8	50'0	49'8	48'07
45'0	43'6	42'4	41'2	40'8	40'2	39'6	38'8	37'8	37'6	37'4	36'8	44'39
40'2	39'6	39'2	39'2	39'0	38'7	38'4	37'8	37'3	37'1	36'8	36'0	37'18
41'8	41'8	42'0	41'6	41'6	41'5	41'0	40'1	40'0	39'8	39'5	38'7	39'38
45'0	44'0	43'2	42'0	41'2	40'8	—	—	—	—	—	—	41'48
46'1	46'1	46'4	46'0	46'0	46'2	46'2	46'1	46'4	46'4	46'1	46'4	45'47
47'6	47'6	47'6	47'6	47'6	47'2	47'0	47'0	46'6	46'0	45'5	45'5	46'96
48'0	47'6	47'5	47'3	46'8	46'0	45'3	45'0	44'8	44'2	43'8	43'5	46'10
43'0	42'0	42'2	43'0	42'8	42'5	42'2	41'7	41'4	41'9	41'9	41'5	42'47
45'4	44'2	43'5	43'0	42'7	41'4	41'1	41'0	41'0	41'4	41'8	41'8	43'09
42'4	42'2	41'3	41'4	41'6	42'0	—	—	—	—	—	—	41'79
43'5	43'1	43'0	42'7	42'2	41'7	41'3	40'7	39'8	39'4	38'8	37'8	41'97
40'2	41'0	40'5	40'1	39'8	39'8	40'0	40'7	40'5	40'3	40'1	39'9	38'68
45'8	46'0	46'0	46'0	44'3	43'5	43'1	42'8	41'9	41'0	41'4	41'0	43'14
46'4	45'9	45'6	45'3	45'1	44'8	44'5	45'0	45'0	45'0	45'4	45'6	44'40
47'8	47'4	47'4	47'6	47'0	46'9	46'7	46'7	46'6	46'5	46'5	46'2	46'49
44'2	43'6	43'8	44'2	44'0	43'2	—	—	—	—	—	—	42'46
40'8	41'2	41'3	41'4	41'2	40'8	40'6	39'4	38'5	37'8	37'3	36'0	39'19
40'0	40'0	39'1	37'9	36'5	36'0	35'5	34'6	34'0	33'6	33'2	32'4	36'58
41'4	40'8	39'0	39'1	39'1	39'5	39'4	38'9	38'5	39'0	39'1	39'7	38'24
45'8	45'8	45'3	45'0	44'0	44'0	43'2	42'0	41'2	40'2	39'5	38'4	42'60
43'5	43'9	43'6	43'4	43'3	43'5	43'5	43'4	43'6	43'3	42'8	41'6	42'25
45'2	44'8	44'8	44'0	44'2	44'2	—	—	—	—	—	—	42'28
—	—	—	—	—	—	36'6	36'7	36'9	37'1	37'1	37'4	—
44'25	43'96	43'65	43'39	43'04	42'77	41'82	41'63	41'44	41'33	41'28	41'00	42'37

HORIZONTAL FORCE.													12 <sup>h</sup> .	
One Scale Division = .000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.														
Mean (57th- gen Therm.)	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
MARCH.	1	657.6	652.4	640.2	613.2	622.3	627.0	613.2	616.6	608.0	635.4	626.6	624.2	635.4
	2	629.2	628.2	624.7	624.2	618.2	618.2	619.4	620.2	622.7	625.2	626.4	623.2	627.6
	3	634.2	633.2	630.4	626.6	621.6	614.2	610.2	610.6	619.8	623.3	631.2	630.8	630.2
	4	635.2	636.6	631.4	624.0	613.0	606.2	609.3	615.2	620.7	623.2	626.2	621.2	612.7
	5	631.5	629.3	626.2	620.2	618.3	614.7	612.6	612.2	614.2	623.0	629.4	624.2	626.4
	6	635.2	638.2	634.2	629.2	624.0	613.2	612.7	614.8	625.5	627.7	632.0	635.8	635.8
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	635.0	636.0	632.5	625.2	613.8	612.4	612.0	617.8	630.8	616.2	628.6	631.0	615.6
	9	635.2	616.5	632.0	616.5	622.5	614.4	613.8	614.0	629.8	631.7	635.8	640.0	638.5
	10	627.6	635.0	631.4	633.9	623.2	619.1	619.0	612.5	621.0	632.0	629.0	626.8	630.0
	11	632.2	631.3	629.0	629.0	627.0	626.2	628.6	629.5	632.0	632.0	637.0	637.8	633.0
	12	645.2	647.0	641.0	639.8	636.0	632.0	634.6	632.4	635.0	638.2	641.0	644.8	645.0
	13	647.0	645.0	639.0	643.0	641.7	638.3	636.0	637.8	639.2	651.4	651.2	656.5	632.8
	14	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	650.0	645.2	637.4	632.2	619.7	620.5	621.6	624.4	624.1	638.8	638.5	640.0	610.4
	16	646.0	641.2	636.2	628.0	621.0	617.1	625.0	637.0	643.0	648.0	642.7	641.0	611.0
	17	649.1	648.1	641.2	635.0	627.7	623.8	622.5	624.0	636.0	642.5	648.0	646.7	616.0
	18	642.0	640.0	637.0	621.0	613.2	610.0	615.0	620.0	628.6	628.0	632.2	635.8	635.8
	19	628.0	585.0	588.0	541.1	551.0	575.0	586.5	586.5	600.1	637.7	634.0	614.8	582.5
	20	607.6	607.0	610.0	610.0	604.5	609.8	608.8	609.8	609.2	609.0	604.0	606.5	589.0
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	631.2	633.0	631.0	626.5	618.6	613.2	615.3	615.0	620.0	623.0	628.0	629.0	631.6
	23	636.8	631.4	626.0	623.0	614.0	614.0	612.0	614.0	618.0	624.5	630.0	631.8	620.3
	24	620.0	622.0	612.7	605.5	609.0	602.5	600.5	609.8	611.2	618.2	628.7	630.2	617.5
	25	621.3	616.0	616.5	612.6	606.0	596.0	603.2	607.5	610.0	615.2	614.2	620.4	621.0
	26	617.0	611.2	612.0	611.6	601.5	601.0	602.8	611.8	611.0	621.0	617.0	620.0	630.0
	27	628.8	631.0	630.2	623.5	621.0	623.1	626.2	628.2	633.2	634.0	633.2	634.7	639.0
	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	641.0	639.2	634.0	625.6	617.7	614.0	614.0	616.0	619.8	624.0	631.0	630.4	631.8
	30	637.0	634.5	627.2	622.2	612.5	614.5	612.2	616.2	625.0	630.2	633.8	636.8	628.4
	31	638.0	641.0	635.0	626.8	617.3	617.2	618.0	622.2	625.8	631.8	637.8	639.8	635.2
Hourly Means	635.03	633.40	630.05	624.28	618.67	615.87	616.10	618.83	623.60	628.90	631.51	632.40	629.15	
TEMPERATURE OF THE BIFILAR MAGNET.														
MARCH.	1	37.0	37.0	37.0	37.6	38.6	39.7	40.2	40.7	41.2	41.0	41.1	41.2	41.3
	2	40.5	40.4	40.6	42.7	43.5	43.5	44.5	45.3	46.0	46.5	47.2	47.6	46.3
	3	41.7	41.5	41.0	41.2	41.6	42.2	43.1	43.8	44.2	44.8	45.8	48.9	48.8
	4	41.8	44.4	45.0	46.2	47.1	48.0	48.3	48.8	48.9	49.9	50.4	50.4	50.2
	5	43.5	42.2	41.5	42.4	44.5	46.1	47.0	47.3	48.4	49.0	49.6	49.7	49.3
	6	45.4	44.6	45.2	46.4	47.4	48.5	49.0	49.5	49.5	50.0	49.8	49.4	49.2
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	44.1	43.5	41.8	45.6	45.8	46.6	46.8	47.4	47.4	47.4	47.9	47.9	47.6
	9	42.2	41.3	40.7	40.4	40.4	40.4	40.6	41.0	40.9	41.1	41.2	41.0	40.7
	10	40.6	40.5	41.0	42.2	42.8	44.4	44.9	45.5	45.6	46.0	46.0	46.0	45.7
	11	41.1	40.6	40.3	40.7	40.6	40.8	42.0	42.1	43.0	43.5	44.5	44.2	43.6
	12	35.7	35.4	36.4	38.0	39.2	40.0	41.1	41.5	41.7	43.0	43.0	43.6	43.5
	13	37.5	37.5	37.7	38.5	39.6	41.3	41.8	42.4	43.2	44.2	44.8	45.2	43.7
	14	—	—	—	—	—	—	—	—	—	—	—	—	—
	15	38.7	38.7	39.0	39.2	39.9	41.3	42.2	42.6	42.4	42.5	42.5	42.4	42.3
	16	37.4	36.4	37.0	37.0	37.5	38.0	38.8	39.6	40.4	41.4	41.7	41.9	41.5
	17	36.5	36.2	36.8	38.0	39.4	41.2	41.8	42.7	42.9	43.9	44.7	44.8	44.8
	18	44.2	44.0	44.2	44.9	46.0	47.1	48.4	49.0	49.7	51.2	52.0	52.4	52.3
	19	41.9	41.9	46.4	47.0	48.8	48.7	49.7	49.9	50.0	50.6	50.8	51.7	51.5
	20	49.0	48.3	48.0	48.0	48.4	48.8	49.5	50.1	50.2	50.4	50.4	50.0	50.0
	21	—	—	—	—	—	—	—	—	—	—	—	—	—
	22	41.8	42.0	42.4	43.0	43.0	43.4	43.8	44.0	44.0	44.4	44.9	44.5	44.9
	23	46.8	46.6	46.6	46.7	47.0	47.7	48.1	49.1	49.4	50.5	50.8	51.2	51.5
	24	47.2	47.2	48.4	49.0	49.8	49.9	49.9	50.0	50.5	51.3	51.8	52.6	52.8
	25	50.0	48.7	50.5	51.4	52.0	52.4	52.4	52.1	52.2	52.6	52.6	52.5	52.2
	26	49.5	48.6	48.0	48.4	48.7	49.4	49.8	50.3	50.6	51.0	51.0	50.4	49.9
	27	40.6	40.0	40.0	40.4	40.9	41.4	41.2	41.0	41.4	42.4	42.6	43.0	42.9
	28	—	—	—	—	—	—	—	—	—	—	—	—	—
	29	43.5	43.7	44.8	46.4	48.0	49.0	49.8	50.0	50.0	50.0	50.3	50.0	50.0
	30	44.4	44.0	44.8	45.0	45.2	46.0	46.0	46.0	46.0	46.2	44.8	44.6	45.2
	31	42.0	43.3	44.9	45.5	45.9	46.2	46.3	46.8	46.8	46.8	46.8	46.6	46.3
Hourly Means	42.64	42.99	42.68	43.38	44.07	44.85	45.41	45.81	46.13	46.71	46.97	47.00	46.79	

\* Six minutes late.

\* Twelve minutes late.



HORIZONTAL FORCE.													12 <sup>h</sup> .	
One Scale Division = '000087 parts of the H. F.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.	
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	
APRIL.	1	642 <sup>2</sup> .2	636 <sup>7</sup> .7	636 <sup>2</sup> .2	634 <sup>5</sup> .5	627 <sup>3</sup> .3	622 <sup>8</sup> .8	622 <sup>4</sup> .4	626 <sup>2</sup> .2	631 <sup>0</sup> .0	636 <sup>8</sup> .8	641 <sup>4</sup> .4	639 <sup>0</sup> .0	639 <sup>0</sup> .0
	2	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	640 <sup>0</sup> .0	631 <sup>0</sup> .0	608 <sup>0</sup> .0	617 <sup>0</sup> .0	612 <sup>5</sup> .5	597 <sup>0</sup> .0	582 <sup>2</sup> .2	593 <sup>0</sup> .0	613 <sup>0</sup> .0 <sup>b</sup>	613 <sup>2</sup> .2	659 <sup>0</sup> .0	631 <sup>4</sup> .4	641 <sup>1</sup> .1
	4	—	—	—	—	—	—	—	—	—	—	—	—	—
	5	629 <sup>0</sup> .0	622 <sup>5</sup> .5	613 <sup>5</sup> .5	610 <sup>2</sup> .2	601 <sup>0</sup> .0	600 <sup>8</sup> .8	600 <sup>8</sup> .8	606 <sup>4</sup> .4	606 <sup>0</sup> .0	620 <sup>8</sup> .8	630 <sup>8</sup> .8	624 <sup>2</sup> .2	619 <sup>6</sup> .6
	6	622 <sup>0</sup> .0	615 <sup>8</sup> .8	610 <sup>6</sup> .6	602 <sup>2</sup> .2	593 <sup>2</sup> .2	595 <sup>5</sup> .5	603 <sup>8</sup> .8	608 <sup>0</sup> .0	617 <sup>0</sup> .0	625 <sup>3</sup> .3	625 <sup>0</sup> .0	620 <sup>0</sup> .0	620 <sup>0</sup> .0
	7	621 <sup>2</sup> .2	626 <sup>0</sup> .0	619 <sup>4</sup> .4	609 <sup>9</sup> .9	599 <sup>5</sup> .5	596 <sup>1</sup> .1	599 <sup>1</sup> .1	620 <sup>8</sup> .8	635 <sup>0</sup> .0	602 <sup>0</sup> .0	620 <sup>0</sup> .0	633 <sup>0</sup> .0	625 <sup>0</sup> .0
	8	619 <sup>2</sup> .2	601 <sup>0</sup> .0	601 <sup>0</sup> .0	598 <sup>2</sup> .2	592 <sup>4</sup> .4	591 <sup>0</sup> .0 <sup>c</sup>	594 <sup>5</sup> .5 <sup>d</sup>	599 <sup>2</sup> .2	614 <sup>5</sup> .5	613 <sup>5</sup> .5	610 <sup>0</sup> .0	611 <sup>2</sup> .2	593 <sup>7</sup> .7
	9	609 <sup>0</sup> .0	608 <sup>0</sup> .0	605 <sup>0</sup> .0	600 <sup>0</sup> .0	591 <sup>0</sup> .0	590 <sup>0</sup> .0	600 <sup>5</sup> .5	601 <sup>2</sup> .2	612 <sup>2</sup> .2	617 <sup>0</sup> .0	614 <sup>0</sup> .0	609 <sup>8</sup> .8	611 <sup>2</sup> .2
	10	617 <sup>0</sup> .0	617 <sup>5</sup> .5	612 <sup>0</sup> .0	606 <sup>8</sup> .8	600 <sup>0</sup> .0	602 <sup>0</sup> .0	604 <sup>0</sup> .0	610 <sup>8</sup> .8	614 <sup>2</sup> .2	613 <sup>8</sup> .8	618 <sup>2</sup> .2	616 <sup>8</sup> .8	616 <sup>4</sup> .4
	11	—	—	—	—	—	—	—	—	—	—	—	—	—
	12	633 <sup>6</sup> .6	630 <sup>2</sup> .2	624 <sup>6</sup> .6	616 <sup>0</sup> .0	610 <sup>0</sup> .0	610 <sup>0</sup> .0	616 <sup>8</sup> .8	633 <sup>4</sup> .4	638 <sup>8</sup> .8	649 <sup>0</sup> .0	639 <sup>1</sup> .1	606 <sup>0</sup> .0	619 <sup>6</sup> .6
	13	628 <sup>0</sup> .0	628 <sup>4</sup> .4	620 <sup>4</sup> .4	610 <sup>2</sup> .2	601 <sup>0</sup> .0	600 <sup>6</sup> .6	610 <sup>1</sup> .1	620 <sup>8</sup> .8	632 <sup>7</sup> .7	645 <sup>4</sup> .4	639 <sup>0</sup> .0	620 <sup>0</sup> .0	623 <sup>5</sup> .5
	14	617 <sup>7</sup> .7	614 <sup>8</sup> .8	611 <sup>8</sup> .8	604 <sup>0</sup> .0	590 <sup>8</sup> .8	592 <sup>5</sup> .5	598 <sup>0</sup> .0	608 <sup>5</sup> .5	610 <sup>0</sup> .0	621 <sup>5</sup> .5	624 <sup>2</sup> .2	628 <sup>0</sup> .0	617 <sup>0</sup> .0
	15	614 <sup>0</sup> .0	612 <sup>0</sup> .0	603 <sup>0</sup> .0	589 <sup>0</sup> .0	583 <sup>2</sup> .2	584 <sup>0</sup> .0	592 <sup>2</sup> .2	607 <sup>2</sup> .2	620 <sup>0</sup> .0	628 <sup>0</sup> .0	632 <sup>2</sup> .2	623 <sup>0</sup> .0	617 <sup>8</sup> .8
	16	626 <sup>0</sup> .0	625 <sup>0</sup> .0	617 <sup>0</sup> .0	604 <sup>2</sup> .2	593 <sup>0</sup> .0	593 <sup>2</sup> .2 <sup>e</sup>	606 <sup>0</sup> .0	607 <sup>2</sup> .2	612 <sup>5</sup> .5	626 <sup>0</sup> .0	628 <sup>8</sup> .8	632 <sup>0</sup> .0	629 <sup>2</sup> .2
	17	608 <sup>4</sup> .4	619 <sup>7</sup> .7	613 <sup>0</sup> .0	603 <sup>8</sup> .8	594 <sup>1</sup> .1	594 <sup>2</sup> .2	598 <sup>5</sup> .5	604 <sup>0</sup> .0	608 <sup>6</sup> .6	624 <sup>1</sup> .1	626 <sup>2</sup> .2	629 <sup>0</sup> .0	628 <sup>8</sup> .8
	18	—	—	—	—	—	—	—	—	—	—	—	—	—
	19	640 <sup>0</sup> .0	637 <sup>2</sup> .2	630 <sup>0</sup> .0	622 <sup>0</sup> .0	621 <sup>6</sup> .6	625 <sup>4</sup> .4	629 <sup>0</sup> .0	633 <sup>0</sup> .0	646 <sup>0</sup> .0	642 <sup>8</sup> .8	645 <sup>0</sup> .0	647 <sup>0</sup> .0	645 <sup>0</sup> .0
	20	572 <sup>2</sup> .2	504 <sup>5</sup> .5	490 <sup>5</sup> .5	545 <sup>1</sup> .1	564 <sup>0</sup> .0	581 <sup>0</sup> .0	599 <sup>0</sup> .0	616 <sup>0</sup> .0	635 <sup>0</sup> .0	640 <sup>0</sup> .0	632 <sup>0</sup> .0	615 <sup>8</sup> .8	615 <sup>0</sup> .0
	21	592 <sup>1</sup> .1	530 <sup>0</sup> .0	575 <sup>0</sup> .0	572 <sup>0</sup> .0	569 <sup>5</sup> .5	573 <sup>6</sup> .6	595 <sup>0</sup> .0	609 <sup>0</sup> .0	605 <sup>2</sup> .2	597 <sup>0</sup> .0	607 <sup>4</sup> .4	640 <sup>5</sup> .5	619 <sup>5</sup> .5
	22	600 <sup>7</sup> .7	598 <sup>0</sup> .0	584 <sup>0</sup> .0	585 <sup>6</sup> .6	582 <sup>8</sup> .8	575 <sup>5</sup> .5	586 <sup>2</sup> .2	587 <sup>0</sup> .0	602 <sup>0</sup> .0	604 <sup>0</sup> .0	596 <sup>0</sup> .0	603 <sup>8</sup> .8	603 <sup>0</sup> .0
	23	609 <sup>0</sup> .0	605 <sup>2</sup> .2	602 <sup>4</sup> .4	600 <sup>0</sup> .0	596 <sup>2</sup> .2	599 <sup>8</sup> .8	607 <sup>5</sup> .5	614 <sup>2</sup> .2	614 <sup>1</sup> .1	620 <sup>5</sup> .5	616 <sup>8</sup> .8	611 <sup>0</sup> .0	617 <sup>0</sup> .0
	24	625 <sup>5</sup> .5	621 <sup>0</sup> .0	614 <sup>0</sup> .0	608 <sup>0</sup> .0	605 <sup>0</sup> .0	613 <sup>8</sup> .8	622 <sup>8</sup> .8	626 <sup>9</sup> .9	628 <sup>0</sup> .0	625 <sup>0</sup> .0	621 <sup>0</sup> .0	617 <sup>5</sup> .5	616 <sup>0</sup> .0
	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	627 <sup>0</sup> .0	623 <sup>8</sup> .8	617 <sup>8</sup> .8	616 <sup>0</sup> .0	611 <sup>0</sup> .0	614 <sup>8</sup> .8	620 <sup>0</sup> .0	623 <sup>5</sup> .5	628 <sup>0</sup> .0	632 <sup>0</sup> .0	626 <sup>9</sup> .9	627 <sup>0</sup> .0	618 <sup>8</sup> .8
	27	621 <sup>8</sup> .8	617 <sup>7</sup> .7	613 <sup>0</sup> .0	602 <sup>0</sup> .0	603 <sup>0</sup> .0	604 <sup>0</sup> .0	605 <sup>0</sup> .0	621 <sup>0</sup> .0	622 <sup>6</sup> .6	617 <sup>0</sup> .0	620 <sup>0</sup> .0	621 <sup>8</sup> .8	620 <sup>0</sup> .0
	28	628 <sup>5</sup> .5	624 <sup>0</sup> .0	616 <sup>2</sup> .2	619 <sup>0</sup> .0	615 <sup>0</sup> .0	620 <sup>0</sup> .0	619 <sup>0</sup> .0	630 <sup>2</sup> .2	637 <sup>4</sup> .4	631 <sup>0</sup> .0	628 <sup>2</sup> .2	629 <sup>5</sup> .5	621 <sup>1</sup> .1
	29	626 <sup>4</sup> .4	621 <sup>0</sup> .0	615 <sup>0</sup> .0	610 <sup>0</sup> .0	610 <sup>5</sup> .5	617 <sup>4</sup> .4	626 <sup>2</sup> .2	625 <sup>1</sup> .1	632 <sup>0</sup> .0	648 <sup>2</sup> .2	635 <sup>9</sup> .9	637 <sup>0</sup> .0	619 <sup>0</sup> .0
	30	598 <sup>2</sup> .2	595 <sup>0</sup> .0	607 <sup>8</sup> .8	612 <sup>0</sup> .0	614 <sup>0</sup> .0	600 <sup>2</sup> .2	593 <sup>0</sup> .0	609 <sup>1</sup> .1	612 <sup>9</sup> .9	618 <sup>2</sup> .2	648 <sup>0</sup> .0	641 <sup>0</sup> .0	626 <sup>5</sup> .5
Hourly Means	621 <sup>10</sup> .10	617 <sup>40</sup> .40	611 <sup>73</sup> .73	607 <sup>08</sup> .08	601 <sup>29</sup> .29	601 <sup>34</sup> .34	605 <sup>21</sup> .21	612 <sup>66</sup> .66	619 <sup>40</sup> .40	625 <sup>49</sup> .49	627 <sup>65</sup> .65	622 <sup>85</sup> .85	619 <sup>92</sup> .92	
TEMPERATURE OF THE BILBAR MAGNET.														
APRIL.	1	41 <sup>0</sup> .0	40 <sup>5</sup> .5	41 <sup>0</sup> .0	42 <sup>2</sup> .2	43 <sup>5</sup> .5	44 <sup>5</sup> .5	45 <sup>0</sup> .0	45 <sup>6</sup> .6	45 <sup>5</sup> .5	46 <sup>0</sup> .0	46 <sup>1</sup> .1	45 <sup>8</sup> .8	45 <sup>4</sup> .4
	2	—	—	—	—	—	—	—	—	—	—	—	—	—
	3	44 <sup>4</sup> .4	44 <sup>8</sup> .8	45 <sup>2</sup> .2	46 <sup>6</sup> .6	47 <sup>8</sup> .8	49 <sup>0</sup> .0	50 <sup>0</sup> .0	50 <sup>6</sup> .6	51 <sup>0</sup> .0	51 <sup>8</sup> .8	52 <sup>4</sup> .4	52 <sup>6</sup> .6	52 <sup>9</sup> .9
	4	—	—	—	—	—	—	—	—	—	—	—	—	—
	5	45 <sup>5</sup> .5	46 <sup>9</sup> .9	48 <sup>3</sup> .3	50 <sup>0</sup> .0	51 <sup>4</sup> .4	51 <sup>8</sup> .8	52 <sup>3</sup> .3	52 <sup>6</sup> .6	52 <sup>6</sup> .6	52 <sup>6</sup> .6	52 <sup>5</sup> .5	52 <sup>3</sup> .3	52 <sup>0</sup> .0
	6	49 <sup>4</sup> .4	49 <sup>2</sup> .2	49 <sup>5</sup> .5	49 <sup>8</sup> .8	50 <sup>4</sup> .4	51 <sup>8</sup> .8	51 <sup>8</sup> .8	52 <sup>4</sup> .4	52 <sup>5</sup> .5	53 <sup>0</sup> .0	53 <sup>4</sup> .4	53 <sup>7</sup> .7	53 <sup>6</sup> .6
	7	51 <sup>8</sup> .8	51 <sup>6</sup> .6	51 <sup>9</sup> .9	51 <sup>9</sup> .9	52 <sup>1</sup> .1	52 <sup>8</sup> .8	53 <sup>1</sup> .1	53 <sup>8</sup> .8	54 <sup>5</sup> .5	55 <sup>7</sup> .7	56 <sup>4</sup> .4	57 <sup>1</sup> .1	58 <sup>3</sup> .3
	8	51 <sup>0</sup> .0	53 <sup>7</sup> .7	54 <sup>0</sup> .0	54 <sup>3</sup> .3	54 <sup>8</sup> .8	55 <sup>5</sup> .5	56 <sup>4</sup> .4	57 <sup>5</sup> .5	58 <sup>5</sup> .5	59 <sup>4</sup> .4	60 <sup>0</sup> .0	60 <sup>5</sup> .5	59 <sup>6</sup> .6
	9	52 <sup>0</sup> .0	52 <sup>3</sup> .3	52 <sup>8</sup> .8	53 <sup>4</sup> .4	53 <sup>7</sup> .7	53 <sup>9</sup> .9	54 <sup>3</sup> .3	54 <sup>0</sup> .0	54 <sup>1</sup> .1	54 <sup>8</sup> .8	55 <sup>3</sup> .3	55 <sup>1</sup> .1	55 <sup>1</sup> .1
	10	51 <sup>9</sup> .9	52 <sup>5</sup> .5	53 <sup>7</sup> .7	54 <sup>2</sup> .2	54 <sup>2</sup> .2	54 <sup>2</sup> .2	54 <sup>4</sup> .4	54 <sup>6</sup> .6	54 <sup>8</sup> .8	54 <sup>6</sup> .6	54 <sup>6</sup> .6	54 <sup>1</sup> .1	53 <sup>8</sup> .8
	11	—	—	—	—	—	—	—	—	—	—	—	—	—
	12	48 <sup>2</sup> .2	48 <sup>3</sup> .3	48 <sup>8</sup> .8	49 <sup>5</sup> .5	50 <sup>3</sup> .3	50 <sup>5</sup> .5	50 <sup>9</sup> .9	51 <sup>4</sup> .4	51 <sup>8</sup> .8	52 <sup>5</sup> .5	53 <sup>7</sup> .7	53 <sup>5</sup> .5	53 <sup>7</sup> .7
	13	49 <sup>5</sup> .5	50 <sup>1</sup> .1	51 <sup>2</sup> .2	51 <sup>5</sup> .5	51 <sup>6</sup> .6	51 <sup>9</sup> .9	51 <sup>9</sup> .9	51 <sup>9</sup> .9	51 <sup>9</sup> .9	52 <sup>4</sup> .4	53 <sup>0</sup> .0	53 <sup>0</sup> .0	53 <sup>4</sup> .4
	14	51 <sup>0</sup> .0	51 <sup>4</sup> .4	52 <sup>3</sup> .3	52 <sup>8</sup> .8	53 <sup>2</sup> .2	53 <sup>2</sup> .2	53 <sup>0</sup> .0	53 <sup>0</sup> .0	53 <sup>4</sup> .4	54 <sup>0</sup> .0	54 <sup>9</sup> .9	54 <sup>7</sup> .7	54 <sup>0</sup> .0
	15	49 <sup>5</sup> .5	49 <sup>8</sup> .8	49 <sup>9</sup> .9	50 <sup>0</sup> .0	49 <sup>9</sup> .9	49 <sup>9</sup> .9	49 <sup>9</sup> .9	50 <sup>5</sup> .5	51 <sup>0</sup> .0	51 <sup>6</sup> .6	52 <sup>0</sup> .0	52 <sup>0</sup> .0	51 <sup>3</sup> .3
	16	45 <sup>7</sup> .7	46 <sup>4</sup> .4	47 <sup>1</sup> .1	48 <sup>2</sup> .2	48 <sup>6</sup> .6	48 <sup>8</sup> .8	48 <sup>7</sup> .7	49 <sup>2</sup> .2	48 <sup>7</sup> .7	48 <sup>3</sup> .3	48 <sup>3</sup> .3	48 <sup>7</sup> .7	48 <sup>9</sup> .9
	17	48 <sup>6</sup> .6	48 <sup>6</sup> .6	48 <sup>6</sup> .6	48 <sup>6</sup> .6	48 <sup>5</sup> .5	48 <sup>9</sup> .9	49 <sup>4</sup> .4	49 <sup>0</sup> .0	49 <sup>0</sup> .0	49 <sup>0</sup> .0	48 <sup>5</sup> .5	47 <sup>8</sup> .8	48 <sup>0</sup> .0
	18	—	—	—	—	—	—	—	—	—	—	—	—	—
	19	41 <sup>6</sup> .6	41 <sup>9</sup> .9	42 <sup>2</sup> .2	42 <sup>5</sup> .5	43 <sup>1</sup> .1	43 <sup>5</sup> .5	44 <sup>3</sup> .3	45 <sup>2</sup> .2	46 <sup>0</sup> .0	46 <sup>7</sup> .7	47 <sup>2</sup> .2	48 <sup>5</sup> .5	49 <sup>1</sup> .1
	20	48 <sup>9</sup> .9	49 <sup>1</sup> .1	49 <sup>3</sup> .3	49 <sup>0</sup> .0	49 <sup>6</sup> .6	50 <sup>0</sup> .0	50 <sup>8</sup> .8	51 <sup>4</sup> .4	51 <sup>6</sup> .6	51 <sup>9</sup> .9	52 <sup>4</sup> .4	52 <sup>2</sup> .2	52 <sup>2</sup> .2
	21	52 <sup>4</sup> .4	52 <sup>4</sup> .4	53 <sup>0</sup> .0	53 <sup>2</sup> .2	53 <sup>3</sup> .3	53 <sup>5</sup> .5	54 <sup>5</sup> .5	55 <sup>6</sup> .6	55 <sup>5</sup> .5	57 <sup>0</sup> .0	59 <sup>4</sup> .4	59 <sup>9</sup> .9	60 <sup>6</sup> .6
	22	61 <sup>5</sup> .5	61 <sup>5</sup> .5	61 <sup>0</sup> .0	60 <sup>8</sup> .8	60 <sup>5</sup> .5	60 <sup>4</sup> .4	60 <sup>2</sup> .2	60 <sup>0</sup> .0	59 <sup>5</sup> .5	59 <sup>5</sup> .5	59 <sup>5</sup> .5	59 <sup>0</sup> .0	59 <sup>0</sup> .0
	23	53 <sup>5</sup> .5	53 <sup>0</sup> .0	52 <sup>6</sup> .6	52 <sup>4</sup> .4	53 <sup>0</sup> .0	53 <sup>6</sup> .6	54 <sup>0</sup> .0	54 <sup>0</sup> .0	54 <sup>4</sup> .4	55 <sup>3</sup> .3	55 <sup>7</sup> .7	55 <sup>5</sup> .5	55 <sup>5</sup> .5
	24	49 <sup>6</sup> .6	50 <sup>2</sup> .2	50 <sup>9</sup> .9	51 <sup>5</sup> .5	52 <sup>4</sup> .4	53 <sup>5</sup> .5	53 <sup>9</sup> .9	54 <sup>0</sup> .0	54 <sup>2</sup> .2	54 <sup>7</sup> .7	55 <sup>3</sup> .3	55 <sup>7</sup> .7	55 <sup>6</sup> .6
	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	52 <sup>3</sup> .3	52 <sup>4</sup> .4	52 <sup>5</sup> .5	52 <sup>8</sup> .8	53 <sup>8</sup> .8	54 <sup>5</sup> .5	55 <sup>5</sup> .5	56 <sup>5</sup> .5	57 <sup>4</sup> .4	58 <sup>3</sup> .3	58 <sup>3</sup> .3	59 <sup>0</sup> .0	59 <sup>0</sup> .0
	27													

ure, 1° 63.

HORIZONTAL FORCE.  
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
611'4	636'0	639'0	641'0	639'0	633'5	631'0	632'2	640'9	637'8	636'6	640'6	637'0	610'0	633'84
659'0	631'4	641'1	598'8	597'0	629'0	607'2	581'6	619'0	627'0	617'4	617'0	622'5	629'0	616'12
630'8	621'2	619'6	618'8	625'5	619'4	617'0	628'8	627'4	622'0	619'0	623'0	623'2	622'0	617'99
625'0	620'0	620'0	625'4	611'0	618'2	620'0	613'0	617'0	623'3	616'6	622'0	620'0	613'8	614'95
620'0	633'0	625'0	611'2	606'0	570'0	530'4	463'5	493'8	407'8	240'0	435'9	489'0	610'0	561'15
610'0	611'2	593'7	596'3	597'0	582'5	596'2	591'2	593'0	597'1	601'6	603'0	609'0	610'8	600'71
611'0	609'8	611'2	607'8	608'0	613'0	612'1	612'8	613'4	615'0	614'4	614'0	618'4	618'0	609'16
618'2	616'8	616'4	616'0	617'2	615'0	617'0	616'4	627'0	629'2	629'2	632'0	634'0	634'7	617'59
639'1	606'0	619'6	619'8	620'1	622'0	625'0	623'0	627'0	625'2	628'0	628'0	628'2	630'8	625'18
639'0	620'0	629'5	625'0	615'0	609'0	615'0	620'0	622'2	617'0	620'8	619'0	618'2	623'1	620'18
621'2	628'0	617'0	605'0	609'0	601'6	606'0	610'0	613'9	611'9	616'0	616'2	616'2	617'4	610'13
622'2	623'9	617'8	615'8	621'2	615'0	618'0	620'6	624'7	620'0	618'8	619'0	619'0	626'2	613'57
628'8	632'0	629'2	634'1	610'2	591'0	607'2	611'0	626'0	623'5	611'2	621'0	626'2	623'4	616'16
626'2	629'0	628'8	625'9	623'4	626'0	627'0	626'0	639'2	630'3	639'8	640'2	610'7	639'2	621'63
615'0	617'0	615'0	615'0	615'0	639'2	643'4	619'0	641'2	625'9	519'4	477'1	536'6	517'3	618'05
632'0	615'8	615'0	606'0	610'0	612'8	610'0	614'8	615'5	612'0	598'0	611'2	620'8	621'0	597'59
607'1	610'5	619'5	596'8	599'0	590'9	601'1	601'2	598'0	600'5	597'1	599'0	599'0	601'2	591'70
596'0	603'8	603'0	602'1	602'0	601'8	604'0	604'8	606'0	601'0	603'5	605'2	608'0	609'2	598'42
616'8	611'0	617'0	612'8	611'5	613'0	615'0	613'0	615'0	614'2	615'2	617'6	618'2	622'4	611'86
621'0	617'5	616'0	616'0	617'5	618'0	617'4	617'0	622'0	623'8	625'0	623'4	623'2	626'1	619'75
626'9	627'0	618'8	605'2	609'8	618'2	616'4	615'6	616'0	617'4	619'0	619'1	620'2	619'8	619'32
620'0	621'8	620'0	617'8	617'8	618'6	620'0	622'1	621'1	622'0	621'8	621'0	622'0	626'5	617'61
628'2	629'5	621'1	618'0	616'2	619'0	622'0	626'0	628'1	625'0	613'0	615'0	605'0	627'0	622'17
635'9	637'0	619'0	618'0	605'0	618'0	614'0	620'0	617'0	613'0	580'3	610'0	612'2	595'8	617'79
618'0	611'0	626'5	631'0	608'5	608'8	615'2	611'2	612'0	618'1	618'2	618'8	620'0	615'0	614'70
627'65	622'85	619'92	616'70	613'00	613'98	615'41	615'03	620'19	620'37	617'26	620'52	621'02	620'96	616'15

TEMPERATURE OF THE BILAR MAGNET.

46'4	45'8	45'4	41'6	41'3	41'4	45'0	45'6	44'9	45'0	41'9	41'6	41'8	44'4	44'36
52'4	52'6	52'9	52'4	52'4	51'8	51'3	50'6	46'7	46'1	46'1	46'0	46'0	46'6	48'96
52'5	52'3	52'0	51'0	50'8	50'2	50'0	49'5	49'4	49'4	49'2	49'2	49'2	49'2	50'33
53'4	53'7	53'6	53'4	53'2	53'2	53'0	52'8	52'5	52'3	52'3	52'2	52'2	52'2	52'07
56'4	57'1	58'3	57'6	57'5	57'0	56'0	55'7	55'2	51'7	51'0	51'2	51'0	53'9	51'63
60'0	61'5	59'6	58'2	57'4	57'0	56'6	55'7	55'2	54'4	51'0	53'4	52'9	52'5	56'06
55'3	55'4	55'1	54'2	53'8	53'4	52'9	52'4	52'1	52'0	52'0	51'8	51'7	51'6	53'29
54'6	51'1	53'8	53'1	52'4	51'9	51'5	51'2	46'5	46'5	46'6	47'4	48'0	48'4	51'88
53'7	53'5	53'7	52'6	52'3	52'0	51'8	51'5	51'1	51'0	51'0	50'8	50'4	49'6	51'13
53'0	53'0	53'4	53'0	52'9	52'9	52'8	52'6	52'6	52'2	51'8	51'3	51'1	51'1	51'98
51'9	51'7	51'0	53'5	53'3	52'9	52'6	52'2	52'0	51'5	50'9	50'4	50'0	49'8	52'50
52'0	52'0	51'3	50'4	49'7	49'1	48'7	48'2	48'0	47'2	46'8	46'5	46'2	46'0	49'34
48'3	48'7	48'9	48'5	48'1	47'8	47'8	47'8	48'2	48'2	48'2	48'4	48'5	48'7	48'16
48'5	47'8	48'0	47'1	46'6	46'2	46'5	46'0	40'4	41'0	41'1	41'1	41'6	41'4	46'10
47'2	49'5	49'4	49'4	49'4	49'5	49'5	49'4	49'4	49'0	49'0	49'2	49'4	49'1	46'85
52'4	52'2	52'2	52'0	52'1	52'5	52'8	53'0	53'4	53'0	52'8	52'6	52'6	52'3	51'59
59'4	59'9	60'6	61'4	62'1	62'5	62'5	62'0	62'0	61'9	61'5	61'5	61'5	61'6	58'37
59'5	59'0	59'0	58'5	58'2	57'8	57'2	56'6	56'0	55'5	55'0	54'5	54'5	51'2	58'35
55'7	55'3	55'5	54'6	54'3	54'0	53'4	53'0	52'6	52'0	51'7	51'3	51'3	50'0	53'36
55'3	55'7	55'6	55'1	55'0	54'5	54'2	54'0	51'2	51'2	51'3	51'4	51'7	52'0	53'05
58	59'0	59'0	58'7	58'7	58'2	57'5	57'0	57'2	56'8	56'6	56'2	55'5	55'2	56'27
55'0	55'3	55'0	54'0	53'0	52'5	51'6	51'1	50'6	50'3	49'8	49'4	49'2	48'5	53'19
52'5	52'3	51'9	51'1	50'4	49'7	49'5	49'7	49'6	49'5	49'5	49'5	49'5	49'8	50'87
51'9	51'7	51'7	51'4	51'3	51'5	51'5	51'1	51'1	51'0	50'8	50'8	50'4	50'0	50'65
53'4	53'2	52'5	51'6	51'3	51'3	50'8	50'2	50'2	49'6	49'2	49'0	49'1	48'5	50'86
53'66	53'61	53'42	52'71	52'35	52'01	51'58	51'23	50'39	50'13	49'96	49'79	49'70	49'51	51'56

\* Five minutes late.

\* Eight minutes late.

\* Ten minutes late.

HORIZONTAL FORCE.													
One Scale Division = $\frac{1}{100000}$ parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Galtin- gen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
MAY.	1	623 <sup>h</sup> 1	621 <sup>h</sup> 9	625 <sup>h</sup> 0	622 <sup>h</sup> 0	603 <sup>h</sup> 9	598 <sup>h</sup> 0	609 <sup>h</sup> 0	613 <sup>h</sup> 2	625 <sup>h</sup> 0	636 <sup>h</sup> 0	632 <sup>h</sup> 0	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	621 <sup>h</sup> 0	621 <sup>h</sup> 5	621 <sup>h</sup> 2	616 <sup>h</sup> 0	614 <sup>h</sup> 0	611 <sup>h</sup> 0	615 <sup>h</sup> 9	622 <sup>h</sup> 0	618 <sup>h</sup> 0	635 <sup>h</sup> 0	620 <sup>h</sup> 2	
	4	621 <sup>h</sup> 0	621 <sup>h</sup> 0	614 <sup>h</sup> 4	603 <sup>h</sup> 0	601 <sup>h</sup> 2	603 <sup>h</sup> 0	609 <sup>h</sup> 0	616 <sup>h</sup> 2	621 <sup>h</sup> 2	625 <sup>h</sup> 8	628 <sup>h</sup> 2	625 <sup>h</sup> 1
	5	621 <sup>h</sup> 3	620 <sup>h</sup> 8	612 <sup>h</sup> 0	603 <sup>h</sup> 8	598 <sup>h</sup> 8	602 <sup>h</sup> 0	607 <sup>h</sup> 8	613 <sup>h</sup> 4	621 <sup>h</sup> 4	621 <sup>h</sup> 0	621 <sup>h</sup> 8	622 <sup>h</sup> 2
	6	624 <sup>h</sup> 8	620 <sup>h</sup> 0	616 <sup>h</sup> 4	609 <sup>h</sup> 8	603 <sup>h</sup> 4	597 <sup>h</sup> 2	600 <sup>h</sup> 0	609 <sup>h</sup> 6	613 <sup>h</sup> 7	611 <sup>h</sup> 0	616 <sup>h</sup> 2	616 <sup>h</sup> 0
	7	622 <sup>h</sup> 8	623 <sup>h</sup> 0	618 <sup>h</sup> 0	605 <sup>h</sup> 0	596 <sup>h</sup> 2	598 <sup>h</sup> 0	603 <sup>h</sup> 8	605 <sup>h</sup> 0	605 <sup>h</sup> 0	613 <sup>h</sup> 0	613 <sup>h</sup> 0	615 <sup>h</sup> 2
	8	450 <sup>h</sup> 7	539 <sup>h</sup> 0	538 <sup>h</sup> 0	545 <sup>h</sup> 2	589 <sup>h</sup> 0	580 <sup>h</sup> 0	593 <sup>h</sup> 5	612 <sup>h</sup> 0	611 <sup>h</sup> 0	610 <sup>h</sup> 4	601 <sup>h</sup> 0	597 <sup>h</sup> 0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	613 <sup>h</sup> 0	607 <sup>h</sup> 0	609 <sup>h</sup> 0	603 <sup>h</sup> 2	598 <sup>h</sup> 0	598 <sup>h</sup> 4	600 <sup>h</sup> 0	609 <sup>h</sup> 0	608 <sup>h</sup> 8	610 <sup>h</sup> 4	608 <sup>h</sup> 4	608 <sup>h</sup> 4
	11	607 <sup>h</sup> 8	602 <sup>h</sup> 7	600 <sup>h</sup> 0	596 <sup>h</sup> 4	596 <sup>h</sup> 8	602 <sup>h</sup> 5	602 <sup>h</sup> 8	607 <sup>h</sup> 9	607 <sup>h</sup> 0	607 <sup>h</sup> 2	602 <sup>h</sup> 8	605 <sup>h</sup> 0
	12	604 <sup>h</sup> 8	601 <sup>h</sup> 2	596 <sup>h</sup> 0	591 <sup>h</sup> 0	593 <sup>h</sup> 5	596 <sup>h</sup> 8	601 <sup>h</sup> 9	606 <sup>h</sup> 0	608 <sup>h</sup> 0 <sup>b</sup>	6 9 <sup>h</sup> 1	607 <sup>h</sup> 7	601 <sup>h</sup> 0
	13	599 <sup>h</sup> 5	600 <sup>h</sup> 9	592 <sup>h</sup> 5	588 <sup>h</sup> 0	583 <sup>h</sup> 0	585 <sup>h</sup> 6	590 <sup>h</sup> 0	599 <sup>h</sup> 0	608 <sup>h</sup> 0	611 <sup>h</sup> 0	611 <sup>h</sup> 2	610 <sup>h</sup> 2
	14	608 <sup>h</sup> 0	607 <sup>h</sup> 0	597 <sup>h</sup> 0	589 <sup>h</sup> 8	586 <sup>h</sup> 5	590 <sup>h</sup> 0	597 <sup>h</sup> 0	610 <sup>h</sup> 8	628 <sup>h</sup> 0	622 <sup>h</sup> 8	618 <sup>h</sup> 2	614 <sup>h</sup> 2
	15	581 <sup>h</sup> 5	596 <sup>h</sup> 5	610 <sup>h</sup> 2	601 <sup>h</sup> 4	580 <sup>h</sup> 4	581 <sup>h</sup> 2	598 <sup>h</sup> 8	613 <sup>h</sup> 2	619 <sup>h</sup> 8	607 <sup>h</sup> 8	622 <sup>h</sup> 0	614 <sup>h</sup> 0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	598 <sup>h</sup> 8	591 <sup>h</sup> 4	586 <sup>h</sup> 2	577 <sup>h</sup> 9	569 <sup>h</sup> 0	575 <sup>h</sup> 6	591 <sup>h</sup> 6	612 <sup>h</sup> 0	611 <sup>h</sup> 2	611 <sup>h</sup> 4	619 <sup>h</sup> 0	609 <sup>h</sup> 0
	18	595 <sup>h</sup> 9	598 <sup>h</sup> 0	591 <sup>h</sup> 2	589 <sup>h</sup> 2	583 <sup>h</sup> 5	577 <sup>h</sup> 1	588 <sup>h</sup> 0	586 <sup>h</sup> 0	588 <sup>h</sup> 0	597 <sup>h</sup> 0	597 <sup>h</sup> 4	605 <sup>h</sup> 0
	19	599 <sup>h</sup> 0	589 <sup>h</sup> 0	596 <sup>h</sup> 9	590 <sup>h</sup> 0	593 <sup>h</sup> 2	595 <sup>h</sup> 5	597 <sup>h</sup> 0	602 <sup>h</sup> 0	607 <sup>h</sup> 0	603 <sup>h</sup> 0	601 <sup>h</sup> 5	601 <sup>h</sup> 0
	20	599 <sup>h</sup> 0	596 <sup>h</sup> 0	593 <sup>h</sup> 0	581 <sup>h</sup> 8	589 <sup>h</sup> 0	588 <sup>h</sup> 0	591 <sup>h</sup> 0	595 <sup>h</sup> 4	607 <sup>h</sup> 5 <sup>d</sup>	610 <sup>h</sup> 0	611 <sup>h</sup> 4	610 <sup>h</sup> 5
	21	603 <sup>h</sup> 0	597 <sup>h</sup> 5	591 <sup>h</sup> 0	588 <sup>h</sup> 4	586 <sup>h</sup> 1	590 <sup>h</sup> 0	597 <sup>h</sup> 4	599 <sup>h</sup> 0	600 <sup>h</sup> 0	616 <sup>h</sup> 0	616 <sup>h</sup> 2	611 <sup>h</sup> 2
	22	605 <sup>h</sup> 8	601 <sup>h</sup> 5	598 <sup>h</sup> 4	597 <sup>h</sup> 0	596 <sup>h</sup> 2	591 <sup>h</sup> 8	589 <sup>h</sup> 8	591 <sup>h</sup> 9	600 <sup>h</sup> 8	602 <sup>h</sup> 7	605 <sup>h</sup> 0	601 <sup>h</sup> 0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	605 <sup>h</sup> 4	602 <sup>h</sup> 2	598 <sup>h</sup> 0	591 <sup>h</sup> 8	591 <sup>h</sup> 0	597 <sup>h</sup> 6	600 <sup>h</sup> 1	600 <sup>h</sup> 9	608 <sup>h</sup> 0	611 <sup>h</sup> 0	609 <sup>h</sup> 4	612 <sup>h</sup> 5
	25	613 <sup>h</sup> 0	612 <sup>h</sup> 4	605 <sup>h</sup> 0	602 <sup>h</sup> 0	595 <sup>h</sup> 0	594 <sup>h</sup> 0	598 <sup>h</sup> 0	601 <sup>h</sup> 0	611 <sup>h</sup> 0	611 <sup>h</sup> 0	606 <sup>h</sup> 8	611 <sup>h</sup> 0
	26	607 <sup>h</sup> 0	611 <sup>h</sup> 0	613 <sup>h</sup> 0	602 <sup>h</sup> 0	598 <sup>h</sup> 0	599 <sup>h</sup> 5	601 <sup>h</sup> 0	612 <sup>h</sup> 8	611 <sup>h</sup> 4	611 <sup>h</sup> 0	609 <sup>h</sup> 8	612 <sup>h</sup> 2
	27	625 <sup>h</sup> 0	624 <sup>h</sup> 1	619 <sup>h</sup> 0	605 <sup>h</sup> 0	596 <sup>h</sup> 8	602 <sup>h</sup> 0	611 <sup>h</sup> 2	621 <sup>h</sup> 8	630 <sup>h</sup> 0	643 <sup>h</sup> 2	645 <sup>h</sup> 8	643 <sup>h</sup> 5
	28	600 <sup>h</sup> 0	600 <sup>h</sup> 8	601 <sup>h</sup> 8	597 <sup>h</sup> 2	588 <sup>h</sup> 8	595 <sup>h</sup> 4	607 <sup>h</sup> 0	609 <sup>h</sup> 0	609 <sup>h</sup> 0	609 <sup>h</sup> 4	608 <sup>h</sup> 0	608 <sup>h</sup> 2
	29	599 <sup>h</sup> 8	593 <sup>h</sup> 9	592 <sup>h</sup> 0	577 <sup>h</sup> 0	568 <sup>h</sup> 5	596 <sup>h</sup> 2	608 <sup>h</sup> 4	605 <sup>h</sup> 8	612 <sup>h</sup> 4	597 <sup>h</sup> 8	608 <sup>h</sup> 0	601 <sup>h</sup> 0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	616 <sup>h</sup> 6	619 <sup>h</sup> 0	613 <sup>h</sup> 8	608 <sup>h</sup> 7	596 <sup>h</sup> 0	590 <sup>h</sup> 5	611 <sup>h</sup> 0	618 <sup>h</sup> 0	622 <sup>h</sup> 0	623 <sup>h</sup> 0	631 <sup>h</sup> 0	624 <sup>h</sup> 0
Hourly Means	608 <sup>h</sup> 57	607 <sup>h</sup> 33	603 <sup>h</sup> 97	597 <sup>h</sup> 27	592 <sup>h</sup> 40	591 <sup>h</sup> 20	600 <sup>h</sup> 25	607 <sup>h</sup> 52	612 <sup>h</sup> 92	611 <sup>h</sup> 57	615 <sup>h</sup> 48	614 <sup>h</sup> 53	

TEMPERATURE OF THE BIFLAR MAGNET.												
MAY.	1	48 <sup>h</sup> 5	49 <sup>h</sup> 3	50 <sup>h</sup> 2	51 <sup>h</sup> 0	51 <sup>h</sup> 4	51 <sup>h</sup> 4	51 <sup>h</sup> 4	51 <sup>h</sup> 9	52 <sup>h</sup> 4	53 <sup>h</sup> 1	53 <sup>h</sup> 0
	2	—	—	—	—	—	—	—	—	—	—	—
	3	48 <sup>h</sup> 5	49 <sup>h</sup> 0	51 <sup>h</sup> 5	51 <sup>h</sup> 6	51 <sup>h</sup> 6	51 <sup>h</sup> 6	51 <sup>h</sup> 7	52 <sup>h</sup> 2	52 <sup>h</sup> 5	52 <sup>h</sup> 5	53 <sup>h</sup> 0
	4	51 <sup>h</sup> 7	52 <sup>h</sup> 5	53 <sup>h</sup> 6	54 <sup>h</sup> 2	54 <sup>h</sup> 5	54 <sup>h</sup> 8	55 <sup>h</sup> 5	55 <sup>h</sup> 6	55 <sup>h</sup> 8	56 <sup>h</sup> 1	56 <sup>h</sup> 2
	5	52 <sup>h</sup> 5	53 <sup>h</sup> 3	54 <sup>h</sup> 3	55 <sup>h</sup> 2	56 <sup>h</sup> 1	56 <sup>h</sup> 8	57 <sup>h</sup> 2	57 <sup>h</sup> 8	58 <sup>h</sup> 5	59 <sup>h</sup> 1	59 <sup>h</sup> 5
	6	54 <sup>h</sup> 0	54 <sup>h</sup> 9	55 <sup>h</sup> 4	56 <sup>h</sup> 5	58 <sup>h</sup> 1	58 <sup>h</sup> 4	59 <sup>h</sup> 0	60 <sup>h</sup> 0	60 <sup>h</sup> 7	61 <sup>h</sup> 8	62 <sup>h</sup> 3
	7	57 <sup>h</sup> 6	57 <sup>h</sup> 8	58 <sup>h</sup> 8	60 <sup>h</sup> 2	61 <sup>h</sup> 3	62 <sup>h</sup> 2	62 <sup>h</sup> 4	62 <sup>h</sup> 9	63 <sup>h</sup> 2	63 <sup>h</sup> 5	63 <sup>h</sup> 5
	8	60 <sup>h</sup> 0	60 <sup>h</sup> 0	59 <sup>h</sup> 9	60 <sup>h</sup> 5	61 <sup>h</sup> 2	61 <sup>h</sup> 4	61 <sup>h</sup> 6	61 <sup>h</sup> 3	61 <sup>h</sup> 3	62 <sup>h</sup> 0	62 <sup>h</sup> 8
	9	—	—	—	—	—	—	—	—	—	—	—
	10	58 <sup>h</sup> 1	58 <sup>h</sup> 5	59 <sup>h</sup> 0	59 <sup>h</sup> 0	60 <sup>h</sup> 8	62 <sup>h</sup> 0	62 <sup>h</sup> 2	62 <sup>h</sup> 4	62 <sup>h</sup> 8	63 <sup>h</sup> 4	63 <sup>h</sup> 6
	11	61 <sup>h</sup> 7	61 <sup>h</sup> 4	61 <sup>h</sup> 2	61 <sup>h</sup> 4	62 <sup>h</sup> 3	63 <sup>h</sup> 2	64 <sup>h</sup> 0	64 <sup>h</sup> 5	64 <sup>h</sup> 9	65 <sup>h</sup> 4	65 <sup>h</sup> 3
	12	63 <sup>h</sup> 0	63 <sup>h</sup> 3	64 <sup>h</sup> 1	65 <sup>h</sup> 5	66 <sup>h</sup> 1	66 <sup>h</sup> 8	67 <sup>h</sup> 4	67 <sup>h</sup> 4	67 <sup>h</sup> 9	67 <sup>h</sup> 5	67 <sup>h</sup> 2
	13	63 <sup>h</sup> 5	63 <sup>h</sup> 1	64 <sup>h</sup> 4	65 <sup>h</sup> 2	66 <sup>h</sup> 4	66 <sup>h</sup> 2	66 <sup>h</sup> 0	66 <sup>h</sup> 0	66 <sup>h</sup> 3	66 <sup>h</sup> 5	66 <sup>h</sup> 5
	14	61 <sup>h</sup> 0	61 <sup>h</sup> 8	62 <sup>h</sup> 2	61 <sup>h</sup> 0	65 <sup>h</sup> 1	65 <sup>h</sup> 0	65 <sup>h</sup> 2	65 <sup>h</sup> 2	65 <sup>h</sup> 2	65 <sup>h</sup> 2	65 <sup>h</sup> 1
	15	59 <sup>h</sup> 5	60 <sup>h</sup> 4	61 <sup>h</sup> 2	62 <sup>h</sup> 0	63 <sup>h</sup> 0	63 <sup>h</sup> 9	64 <sup>h</sup> 3	64 <sup>h</sup> 8	65 <sup>h</sup> 5	66 <sup>h</sup> 3	66 <sup>h</sup> 9
	16	—	—	—	—	—	—	—	—	—	—	—
	17	60 <sup>h</sup> 0	60 <sup>h</sup> 6	60 <sup>h</sup> 8	61 <sup>h</sup> 5	62 <sup>h</sup> 4	63 <sup>h</sup> 3	63 <sup>h</sup> 6	64 <sup>h</sup> 4	65 <sup>h</sup> 0	65 <sup>h</sup> 5	65 <sup>h</sup> 8
	18	60 <sup>h</sup> 0	60 <sup>h</sup> 4	61 <sup>h</sup> 0	61 <sup>h</sup> 8	62 <sup>h</sup> 6	63 <sup>h</sup> 5	64 <sup>h</sup> 5	65 <sup>h</sup> 0	65 <sup>h</sup> 7	66 <sup>h</sup> 4	66 <sup>h</sup> 7
	19	62 <sup>h</sup> 0	62 <sup>h</sup> 8	62 <sup>h</sup> 6	62 <sup>h</sup> 9	63 <sup>h</sup> 7	64 <sup>h</sup> 4	64 <sup>h</sup> 7	65 <sup>h</sup> 1	65 <sup>h</sup> 9	66 <sup>h</sup> 5	67 <sup>h</sup> 0
	20	62 <sup>h</sup> 0	61 <sup>h</sup> 0	62 <sup>h</sup> 1	62 <sup>h</sup> 5	63 <sup>h</sup> 1	63 <sup>h</sup> 6	64 <sup>h</sup> 0	64 <sup>h</sup> 0	64 <sup>h</sup> 5	64 <sup>h</sup> 7	65 <sup>h</sup> 0
	21	59 <sup>h</sup> 4	59 <sup>h</sup> 0	59 <sup>h</sup> 0	59 <sup>h</sup> 0	59 <sup>h</sup> 4	60 <sup>h</sup> 0	60 <sup>h</sup> 5	61 <sup>h</sup> 2	61 <sup>h</sup> 8	62 <sup>h</sup> 5	63 <sup>h</sup> 0
	22	60 <sup>h</sup> 0	61 <sup>h</sup> 0	61 <sup>h</sup> 3	61 <sup>h</sup> 6	62 <sup>h</sup> 0	62 <sup>h</sup> 8	63 <sup>h</sup> 5	64 <sup>h</sup> 0	64 <sup>h</sup> 5	65 <sup>h</sup> 2	65 <sup>h</sup> 4
	23	—	—	—	—	—	—	—	—	—	—	—
	24	61 <sup>h</sup> 4	61 <sup>h</sup> 1	61 <sup>h</sup> 4	61 <sup>h</sup> 5	61 <sup>h</sup> 6	62 <sup>h</sup> 0	62 <sup>h</sup> 1	62 <sup>h</sup> 4	62 <sup>h</sup> 7	63 <sup>h</sup> 2	63 <sup>h</sup> 4
	25	60 <sup>h</sup> 0	60 <sup>h</sup> 0	60 <sup>h</sup> 9	62 <sup>h</sup> 0	62 <sup>h</sup> 9	63 <sup>h</sup> 6	64 <sup>h</sup> 0	64 <sup>h</sup> 8	65 <sup>h</sup> 7	66 <sup>h</sup> 2	66 <sup>h</sup> 0
	26	57 <sup>h</sup> 3	57 <sup>h</sup> 7	58 <sup>h</sup> 4	58 <sup>h</sup> 6	59 <sup>h</sup> 0	59 <sup>h</sup> 3	59 <sup>h</sup> 1	58 <sup>h</sup> 8	58 <sup>h</sup> 8	59 <sup>h</sup> 0	59 <sup>h</sup> 4
	27	56 <sup>h</sup> 0	56 <sup>h</sup> 7	58 <sup>h</sup> 0	58 <sup>h</sup> 6	59 <sup>h</sup> 6	60 <sup>h</sup> 0	60 <sup>h</sup> 5	61 <sup>h</sup> 0	61 <sup>h</sup> 2	61 <sup>h</sup> 8	62 <sup>h</sup> 2
	28	57 <sup>h</sup> 8	58 <sup>h</sup> 0	58 <sup>h</sup> 0	58 <sup>h</sup> 5	59 <sup>h</sup> 6	60 <sup>h</sup> 4	61 <sup>h</sup> 3	62 <sup>h</sup> 6	63 <sup>h</sup> 6	65 <sup>h</sup> 0	65 <sup>h&lt;/</sup>

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 634°0	Sc. Div. 620°2	Sc. Div. 617°2	Sc. Div. 633°5	Sc. Div. 623°8	Sc. Div. 617°5	Sc. Div. 628°8	Sc. Div. 630°0	Sc. Div. 629°7	Sc. Div. 627°9	Sc. Div. 624°0	Sc. Div. 623°03	
621°8	621°3	623°2	620°6	618°8	621°9	622°0	622°8	622°0	621°4	619°0	620°71	
621°1	621°0	620°0	617°7	617°0	620°0	619°2	623°0	620°0	622°0	621°5	621°0	618°04
620°0	620°0	619°0	616°0	618°0	620°0	620°0	620°2	622°0	623°0	624°4	626°2	617°50
616°5	614°8	613°5	614°2	615°8	612°4	612°6	617°0	618°5	613°2	624°5	614°8	613°70
625°0	620°2	594°6	603°5	586°4	592°0	539°8	—	473°5	279°4	534°7	454°3	574°81
595°8	593°6	593°0	594°0	595°0	595°6	—	—	—	—	—	—	—
—	—	—	—	—	—	605°0	607°2	600°0	608°5	609°5	614°0	586°71
606°2	603°9	601°9	601°0	601°0	603°7	604°0	608°0	601°0	606°0	607°0	607°4	605°45
603°4	602°5	602°0	602°5	603°0	604°8	603°5	605°0	600°2	598°0	600°8	599°8	602°68
596°0	599°5	600°0	600°8	603°0	600°4	600°0	599°8	601°4	600°2	601°5	601°5	601°10
610°4	610°8	601°2	602°0	600°8	603°0	599°6	600°3	601°9	602°2	604°5	608°0	601°23
602°2	605°0	609°0	609°2	611°1	610°9	609°5	610°0	607°0	604°6	593°9	596°2	603°75
615°8	609°2	581°9	608°0	614°0	614°4	—	—	—	—	—	—	—
—	—	—	—	—	—	590°0	590°0	592°0	594°0	598°2	591°2	601°56
604°0	593°7	589°0	581°0	579°0	583°8	576°0	548°2	581°8	584°5	595°0	598°0	592°34
606°2	593°0	589°0	591°2	591°4	595°6	593°0	596°0	596°8	596°0	598°8	598°1	592°56
608°8	587°0	598°8	612°5	583°8	586°0	593°2	593°1	593°7	589°8	592°1	592°0	596°20
601°4	600°0	593°2	600°9	597°1	601°0	596°9	594°2	598°8	598°4	596°0	598°0	598°81
613°2	602°1	592°9	591°0	590°8	602°0	599°0	602°0	599°0	600°2	598°0	603°4	599°57
605°2	602°3	602°0	602°5	600°7	600°3	—	—	—	—	—	—	—
—	—	—	—	—	—	613°0	606°0	604°2	604°2	606°0	605°8	601°80
609°0	610°0	608°5	607°4	607°3	603°2	603°2	607°8	605°0	607°8	610°0	612°0	605°21
604°4	604°2	606°4	598°2	591°0	597°0	596°2	597°8	595°0	602°4	601°2	606°0	609°21
610°4	611°4	614°5	613°0	611°2	616°0	616°9	617°5	618°8	619°0	618°8	622°0	611°91
610°0	604°8	606°3	606°0	608°2	584°5	597°8	608°0	612°0	604°2	602°5	608°0	613°61
612°2	611°5	604°0	601°0	601°2	611°0	616°0	602°0	553°5	583°7	576°5	604°1	600°72
604°0	598°8	597°0	595°4	596°0	596°2	—	—	—	—	—	—	—
—	—	—	—	—	—	609°2	611°0	612°2	612°0	611°0	614°1	600°45
626°0	623°2	620°0	619°2	622°2	628°4	620°0	616°1	618°8	621°0	627°8	627°0	618°60
611°11	606°86	604°72	606°38	605°00	605°50	605°39	607°13	606°66	606°66	607°98	608°54	606°31

TEMPERATURE OF THE BIFILAR MAGNET.

52°6	52°3	52°3	51°7	51°6	51°3	—	—	—	—	—	—	50°62
—	—	—	—	—	—	47°2	47°5	47°8	48°0	48°1	48°2	—
53°6	53°7	53°7	53°5	53°4	52°6	52°3	52°0	51°4	51°2	51°0	50°4	52°00
56°3	56°0	55°5	55°4	54°9	54°2	53°8	53°4	53°4	53°4	53°0	52°3	54°52
59°4	59°0	57°9	57°5	57°0	56°8	56°4	55°8	55°0	54°7	54°4	53°8	56°56
62°5	61°5	60°9	60°5	60°2	59°8	59°4	59°0	58°4	57°8	57°4	56°5	59°06
63°2	62°6	62°2	61°8	61°5	61°2	61°2	—	60°8	60°8	60°7	60°6	61°46
63°0	62°6	62°2	61°3	61°0	60°9	—	—	—	—	—	—	—
—	—	—	—	—	—	60°4	60°0	59°8	59°2	58°8	58°4	60°95
63°6	63°3	63°0	62°5	62°4	62°2	62°0	61°8	61°8	62°0	61°6	61°7	61°81
65°2	65°6	64°4	64°0	64°0	63°6	63°5	61°0	63°5	63°0	63°0	62°6	63°64
66°9	66°0	65°9	65°5	65°3	65°3	65°0	64°8	64°6	64°6	64°1	63°6	65°63
67°0	67°0	67°0	65°8	65°4	64°6	64°0	63°2	62°6	62°1	61°6	61°2	64°95
66°5	65°0	64°6	64°0	63°6	63°2	62°7	62°0	61°4	60°9	60°2	59°6	63°45
65°4	65°2	64°1	63°6	63°4	63°0	—	—	—	—	—	—	—
66°9	67°1	66°6	65°8	65°4	65°0	—	—	—	—	—	—	—
—	—	—	—	—	—	62°2	61°9	61°4	60°7	60°5	60°0	63°70
65°9	65°5	64°8	64°1	63°7	63°3	62°9	62°4	62°0	61°6	61°2	60°5	63°19
66°8	66°5	66°1	65°8	65°5	65°2	64°6	63°8	63°2	62°8	62°6	62°1	61°15
67°0	67°0	66°6	66°2	65°2	64°5	64°2	63°5	63°0	62°5	62°2	62°0	61°53
65°0	64°6	64°0	63°5	63°3	62°9	62°5	62°0	61°4	61°0	60°4	59°6	63°13
63°2	62°9	62°6	62°0	61°8	61°2	61°0	60°8	60°5	60°4	60°0	59°8	61°00
63°0	65°1	64°7	64°5	64°3	64°0	—	—	—	—	—	—	—
65°4	65°4	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	63°8	63°0	62°7	62°7	62°5	62°0	63°39
63°4	63°9	63°5	63°2	63°2	63°0	62°5	62°2	61°8	61°4	61°0	60°4	62°57
65°6	65°3	65°0	64°6	64°2	63°5	62°4	61°0	60°0	59°0	58°5	57°4	62°85
66°0	66°0	—	—	—	—	—	—	—	—	—	—	—
59°4	59°6	59°2	58°6	58°1	57°8	57°5	57°0	56°6	56°3	56°0	55°5	58°27
62°5	62°3	61°9	61°4	61°2	60°8	60°2	59°4	59°0	58°5	58°0	57°7	60°03
62°2	62°3	—	—	—	—	—	—	—	—	—	—	—
65°6	66°4	66°2	66°2	66°0	65°8	65°6	65°4	65°4	65°2	65°0	64°5	63°56
66°0	65°5	65°0	64°2	64°0	63°7	—	—	—	—	—	—	—
—	—	—	—	—	—	60°4	60°0	59°6	59°5	59°2	58°8	63°56
—	56°2	55°8	55°6	55°5	55°5	55°6	55°5	55°5	55°5	55°5	55°3	56°41
62°85	62°90	62°92	61°73	61°44	61°04	60°27	59°83	59°43	59°11	58°78	58°31	60°82





1843.

10h.	11h.
33'2	615'4
20'0	613'1
17'9	617'0
18'0	614'0
25'0	619'8
—	—
41'0	616'1
21'1	614'0
46'0	614'0
14'0	621'8
32'0	616'0
21'0	637'0
—	—
44'0	632'0
22'0	622'5
34'0	622'0
21'2	622'4
27'8	619'4
16'2	613'0
—	—
21'8	619'0
30'0	605'0
30'1	606'1
30'1'2	607'0
30'3'0	598'0
33'3'0	592'6
—	—
602'0	607'2
608'2	607'9
608'0	602'5
616'87	614'30

HORIZONTAL FORCE.

One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° d. rise of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly M.
625'0	618'0	600'2	607'0	608'9	609'4	609'6	614'4	610'8	614'0	613'8	605'0	61' 30
612'7	608'9	608'0	610'0	609'8	610'0	611'2	608'0	609'0	620'5	608'8	611'4	60' 39
607'4	607'5	610'0	610'0	601'0	606'0	610'0	610'0	611'4	610'2	610'2	611'3	60' 32
614'0	611'0	611'0	617'0	615'0	620'0	617'2	615'0	616'9	614'0	618'4	617'9	613' 30
619'4	613'6	612'0	614'1	614'2	614'6	—	—	—	—	—	—	—
—	—	—	—	—	607'0	606'4	615'7	613'4	616'8	619'0	—	616' 33
613'0	609'0	608'7	596'0	599'8	598'7	599'0	585'0	586'5	606'0	606'6	605'5	605' 55
606'0	608'0	609'0	608'0	611'5	609'0	610'0	610'3	610'5	609'0	609'4	612'0	609' 00
621'0	603'5	608'5	615'0	610'0	609'2	606'2	614'9	605'0	609'2	607'8	608'0	610' 39
590'6	591'4	598'0	601'2	591'4	597'9	595'9	596'0	599'4	600'2	600'0	600'0	598' 92
615'6	605'8	596'5	599'0	603'1	606'1	610'0	608'5	608'0	610'0	606'0	616'5	601' 21
627'0	617'0	602'0	597'0	591'0	597'2	—	—	—	—	—	—	607' 77
—	—	—	—	—	—	584'5	585'0	618'0	618'0	614'4	616'0	—
612'0	614'0	606'0	600'0	605'0	605'0	614'0	612'6	612'2	613'0	612'7	618'2	606' 55
619'0	619'2	613'5	613'4	618'4	614'0	614'0	609'4	614'2	615'0	616'2	618'1	617' 40
619'4	610'2	613'0	612'2	618'5	612'2	613'0	616'0	616'4 <sup>b</sup>	603'7	612'1	611'0	614' 27
624'0	612'0	608'8	607'1	607'2	606'9	600'0	602'2	608'0	608'0	610'4	609'0	609' 61
611'9	615'3	604'1	601'5	601'0	598'4	598'0	603'5	604'5	603'0	604'0	606'2	606' 50
608'0	608'0	605'0	607'8	606'0	605'0	—	—	—	—	—	—	—
—	—	—	—	—	—	610'2	612'0	612'8	612'5	611'0	614'0	607' 34
619'2	615'0	614'0	601'2	605'0	609'2	608'5	611'3	613'0	613'9	613'9	614'0	610' 75
606'8	608'4	605'8	604'1	605'0	603'1	605'2	606'0	606'2	607'0	610'0	611'1	605' 92
604'0	601'0	603'5	602'0	602'0	601'5	601'5	600'0	601'8	603'2	605'8	609'4	609' 85
602'0	600'0	602'0	600'0	597'5	594'5	595'0	596'0	588'0	597'4 <sup>d</sup>	601'5	604'0	601' 23
599'0	598'5	598'5	599'8	600'2	601'8	601'0	600'2	601'1	602'2	603'3	604'0	600' 96
605'0	597'2	594'4	597'0	598'0	600'4	—	—	—	—	—	—	600' 67
—	—	—	—	—	—	596'1	599'0	600'7	601'4	600'5	606'0	—
593'2	596'8	593'5	590'7	593'1	594'0	594'9	594'4	601'8	593'8	596'0	596'0	597' 31
608'0	599'0	599'0	599'0	597'0	597'6	597'0	595'2	591'5	580'0	603'0	600'0	600' 45
607'7	591'1	591'0	586'0	578'5	571'0	585'0	586'4 <sup>d</sup>	596'5	593'4	600'0	601'1	594' 70
611'19	607'02	604'46	603'70	603'40	603'53	603'62	604'30	606'21	605'87	608'15	609'45	606' 51

61'0	61'0
61'0	61'5
61'6	61'5
61'4	61'1
61'0	63'2
63'3	63'3
—	—
67'0	67'6
61'4	61'2
69'7	70'4
67'5	67'3
66'5	66'2
61'4	61'9
—	—
57'4	57'1
58'6	59'7
62'2	62'2
61'6	61'6
65'4	65'5
61'5	65'0
—	—
66'6	66'6
66'8	67'4
69'6	69'8
71'6	72'0
72'6	72'6
74'9	75'4
—	—
73'4	73'4
72'0	72'2
72'4	72'4
66'47	66'67

TEMPERATURE OF THE BIPOLAR MAGNET.

61'2	61'2	61'3	61'0	61'1	60'8	60'5	60'2	60'0	59'5	59'1	59'0	59'27
65'0	61'6	61'1	61'8	63'4	62'8	62'6	62'0	61'2	61'0	60'4	59'8	62' 11
64'4	61'0	63'6	61'4	63'0	62'6	62'5	62'2	61'8	61'8	61'4	61'1	62' 62
61'0	63'2	62'5	61'8	61'4	60'5	60'0	59'5	58'8	58'5	58'0	57'8	61' 69
63'3	63'3	63'0	62'6	62'1	61'5	—	—	—	—	—	—	—
—	—	—	—	—	—	61'9	61'6	61'0	60'4	60'2	59'0	60' 81
67'4	66'6	66'4	65'5	65'1	64'7	64'3	63'9	63'5	63'2	63'0	62'4	64' 06
61'4	61'0	63'8	61'5	63'2	63'0	62'7	62'7	62'4	62'2	62'0	62'0	63' 06
70'6	70'4	70'1	69'7	69'7	69'3	69'0	68'6	68'5	68'2	68'0	67'7	67' 25
67'3	67'3	67'0	66'6	66'5	66'0	65'9	65'7	65'5	65'3	65'3	65'0	66' 75
65'8	61'6	61'1	61'3	62'9	62'2	61'9	61'1	60'7	60'3	60'0	59'4	64' 21
65'1	65'2	61'8	61'4	61'2	61'0	—	—	—	—	—	—	—
—	—	—	—	—	—	60'0	59'8	59'6	59'5	59'5	59'5	62' 33
57'2	57'0	56'3	55'8	55'5	55'0	55'0	55'0	54'6	54'2	54'0	53'6	56' 80
60'2	60'2	60'2	60'2	59'7	59'0	58'5	58'2	57'8	57'6	57'4	57'0	56' 97
62'2	62'2	62'0	61'1	60'4	60'2	59'8	58'9	58'5	57'6	57'2	57'0	60' 08
61'9	65'0	61'6	61'0	63'5	62'7	62'0	61'6	60'5	60'0	59'2	58'4	61' 60
65'1	61'5	61'1	61'7	63'5	63'4	63'0	63'0	62'8	62'8	62'8	62'8	63' 21
65'3	65'2	65'2	64'5	61'0	61'5	—	—	—	—	—	—	—
—	—	—	—	—	—	61'8	61'9	61'7	61'5	61'5	61'0	63' 16
66'6	66'6	66'4	66'2	65'8	65'5	65'1	64'6	64'0	63'6	63'1	63'0	65' 04
67'5	67'4	67'0	66'4	66'0	65'6	65'2	64'8	64'7	64'5	63'4	63'0	65' 01
70'0	69'9	69'4	69'3	69'0	68'6	68'2	67'6	67'1	66'6	66'2	65'5	67' 57
72'4	72'5	71'8	71'0	70'4	69'5	69'0	68'2	68'0	67'5	66'8	66'2	69' 25
72'6	72'6	71'5	71'2	70'6	70'1	69'6	69'2	69'0	68'9	68'8	68'4	69' 81
75'0	71'0	73'8	73'4	73'4	73'0	—	—	—	—	—	—	—
—	—	—	—	—	—	73'5	73'4	73'0	72'5	72'1	71'7	72' 91
73'2	72'8	72'4	71'6	71'4	71'0	70'6	70'2	69'8	69'0	68'7	68'4	71' 13
72'2	72'1	71'6	70'8	70'3	70'0	69'7	68'0	67'5	67'0	66'5	66'2	69' 57
72'4	72'2	71'6	71'0	70'5	70'0	69'0	68'2	67'8	67'4	66'6	65'7	69' 75
66'74	66'48	66'09	65'61	65'25	64'79	64'30	63'85	63'46	63'10	62'74	62'33	64' 46

\* Seven minutes late.

\* Five minutes late.

HORIZONTAL FORCE.													
One Scale Division = 1/1000000 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
Mean (altim- gen Time.)	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.	10°.	11°.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
JULY.	1	606'5	604'0	595'0	584'7	588'0	594'7	595'8	594'0	593'4	593'6	598'8	599'0
	2	603'1	599'0	594'0	590'8	592'0	591'2	587'8	590'9	591'0	596'0	598'0	596'8
	3	602'0	600'2	594'8	588'8	591'0	596'5	600'0	601'8	605'4	601'0	598'2	595'8
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	594'0	592'8	590'0	587'4	583'4	584'0	591'2	602'2	601'5	601'0	591'4	591'8
	6	592'0	588'0	586'4	578'7	577'1	584'0	598'0	600'4	610'7	601'8	603'0	598'0
	7	601'1	590'3	578'0	581'5	566'0	569'0	585'0	607'0	607'0	601'4	597'0	591'2
	8	589'0	580'0	576'8	580'0	578'8	577'0	577'2	578'5	585'2	586'0	589'0	593'4
	9	588'0	582'4	578'0	571'0	573'4	569'5	571'8	587'4	582'0	611'4	618'0	608'5
	10	568'2	584'0	556'0	550'0	540'0	556'3	569'5	537'0	592'0	591'0	588'0	574'5
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	584'4	586'4	572'0	557'2	548'0	541'7	552'0	563'0	579'3	582'4	577'2	576'0
	13	577'4	578'6	577'5	576'0	565'0	567'0	565'0	566'4	562'3	561'0	572'0	581'0
	14	583'5	582'0	570'0	574'0	567'0	571'4	585'0	590'0	593'5	595'8	604'0	598'0
	15	593'5	588'0	583'5	574'2	572'2	570'8	579'8	584'2	592'8	602'2	600'5	597'8
	16	592'2	587'0	580'8	579'2	576'0	578'0	581'0	586'8	593'5	595'0	598'0	589'0
	17	585'5	575'7	581'2	576'0	568'0	564'0	567'8	570'0	582'0	590'2	596'0	600'0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	590'2	587'5	581'6	572'5	571'4	578'0	574'8	574'5	582'5	578'0	581'4	591'2
	20	585'0	584'2	577'2	576'0	570'0	565'0	561'0	575'3	585'0	598'4	598'0	588'2
	21	590'0	586'8	581'4	574'8	568'2	569'7	571'0	575'0	588'2	591'4	593'8	593'2
	22	592'4	592'0	583'4	589'0	591'8	590'0	589'5	589'0	595'8	598'8	594'8	597'0
	23	591'0	593'0	593'9	585'0	581'5	587'6	585'4	589'0	597'0	612'4	598'1	603'8
	24	598'6	597'0	590'5	585'0	583'0	586'4	591'0	601'0	606'0	610'0	606'0	595'8
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	592'1	584'6	584'0	580'5	570'0	579'0	589'5	609'5	620'0	622'5	620'0	608'2
	27	618'0	606'5	598'5	594'5	591'5	590'5	591'5	601'5	611'8	610'2	611'5	604'0
	28	608'5	608'5	601'2	597'0	599'5	606'5	609'5	608'6	610'8	610'0	610'5	608'0
	29	612'0	609'6	603'2	590'1	590'8	590'9	592'4	597'5	609'5	606'0	607'7	606'5
	30	611'2	609'4	605'0	595'7	589'0	593'0	606'4	609'5	607'5	624'0	614'2	608'2
	31	610'8	607'0	605'0	597'0	590'0	589'5	591'5	595'0	601'2	602'8	606'8	602'8
August 1	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	595'07	592'04	586'49	581'25	577'28	579'68	584'14	589'40	596'14	598'69	598'21	595'71
TEMPERATURE OF THE DIAL OR MAGNET.													
JULY.	1	66'0	66'1	66'8	67'8	69'0	69'9	70'8	71'4	72'2	73'0	73'4	74'0
	2	67'8	68'5	69'2	70'9	72'1	73'0	74'0	74'5	75'4	76'0	76'2	76'1
	3	70'0	70'5	71'4	72'3	73'4	74'6	75'4	76'7	77'4	78'0	78'4	78'5
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	71'6	72'0	72'9	73'2	74'6	75'8	76'4	77'2	77'8	78'4	78'8	78'4
	6	73'2	73'0	73'0	73'0	73'1	73'7	74'4	75'3	76'1	76'6	77'2	77'2
	7	72'2	72'2	72'0	73'0	74'3	75'0	76'2	76'5	77'5	78'5	79'0	79'4
	8	73'2	73'5	74'2	75'0	75'7	78'4	79'0	79'8	79'3	79'0	79'4	79'8
	9	74'9	75'9	76'5	77'4	78'6	79'4	79'8	80'4	80'4	80'6	80'2	80'0
	10	76'2	75'8	75'4	75'6	76'0	77'0	77'4	78'0	79'0	79'9	80'0	79'8
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	75'2	76'0	77'0	77'7	78'0	78'5	78'0	78'4	79'1	80'0	80'6	80'5
	13	76'0	76'4	77'1	77'6	78'5	79'7	80'7	81'5	81'9	81'0	80'9	80'2
	14	74'3	74'4	72'0	72'5	73'2	73'7	73'6	74'9	74'0	73'9	74'5	73'4
	15	69'3	69'0	69'0	69'4	69'8	70'8	71'7	72'4	73'2	74'4	74'6	74'4
	16	71'0	71'3	71'8	72'7	74'0	75'0	76'4	76'8	77'5	78'0	78'4	78'0
	17	74'1	74'2	74'0	75'0	76'1	77'8	79'0	80'4	80'8	80'5	80'4	80'0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	76'4	77'0	77'5	79'4	79'4	80'6	81'5	82'7	82'0	83'0	83'5	84'0
	20	77'5	77'7	79'0	79'2	79'0	79'2	79'4	79'0	79'2	79'8	79'5	79'8
	21	76'5	76'5	76'6	76'6	76'7	77'3	78'0	78'4	78'8	79'3	79'7	79'2
	22	76'2	76'6	76'8	76'6	77'2	77'5	78'0	78'2	78'5	78'8	79'0	79'0
	23	74'7	72'1	72'7	73'4	73'5	73'6	73'5	73'5	73'5	73'6	74'4	74'5
	24	69'4	69'3	70'0	70'6	71'5	71'5	71'6	71'5	72'0	72'4	72'4	72'4
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	71'0	70'4	70'0	69'0	69'2	68'8	68'5	68'5	68'4	68'8	69'0	69'4
	27	63'0	64'0	66'0	66'6	67'0	67'5	67'5	67'5	67'6	67'4	67'5	67'5
	28	63'0	63'5	64'6	65'5	66'5	66'5	67'5	67'5	68'3	68'7	69'1	69'0
	29	64'4	65'2	66'0	67'0	67'5	68'5	69'0	69'4	69'9	70'0	70'3	70'3
	30	66'6	66'6	66'6	66'4	66'6	66'6	66'5	67'5	67'5	68'0	69'0	69'5
	31	64'8	65'1	65'2	65'8	67'4	67'4	68'0	69'0	69'0	69'5	69'5	69'4
August 1	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	71'06	71'30	71'80	72'38	73'09	73'77	74'30	74'83	75'23	75'63	75'99	75'92

12°.
601'5
598'0
591'1
—
592'0
598'0
591'2
588'0
591'0
—
580'0
587'8
594'2
590'0
597'8
586'4
597'0
—
587'4
585'8
589'7
593'8
593'5
598'8
—
587'8
604'0
610'0
601'0
601'0
614'2
602'4
—
593'75
—
73'8
76'5
78'5
—
77'8
77'1
79'4
79'6
79'4
79'4
—
80'4
80'0
73'2
74'4
77'8
80'0
—
81'0
80'0
79'0
79'0
74'5
72'2
—
69'2
64'0
68'8
70'0
69'0
69'4
—
73'81

1-63.

0%.	1%.
598'8	599'0
598'0	598'8
598'2	598'8
591'4	591'8
593'0	598'0
597'0	591'2
599'0	593'4
608'5	608'5
574'5	574'5
572'2	576'0
581'0	581'0
593'0	593'0
597'8	597'8
589'0	589'0
600'0	600'0
591'2	591'2
588'2	588'2
593'2	593'2
597'0	597'0
603'8	603'8
595'8	595'8
608'2	608'2
604'0	604'0
608'0	608'0
606'5	606'5
608'2	608'2
602'8	602'8
598'21	598'21

HORIZONTAL FORCE.  
One Scale Division = 0.00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1-63.

12%.		13%.		14%.		15%.		16%.		17%.		18%.		19%.		20%.		21%.		22%.		23%.		Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
601'5	600'0	599'0	598'2	598'4	595'8	590'0	596'8	598'2	598'1	600'0	601'8	590'8	590'8	598'2	598'1	600'0	601'8	590'8	590'8	598'2	598'1	600'0	601'8	590'8
598'0	600'2	594'0	591'1	592'1	595'2	594'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0	591'0
591'1	595'0	598'0	592'4	590'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0	592'0
592'0	593'0	593'0	593'0	593'2	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0	593'0
598'0	597'4	593'0	595'0	586'1	593'5	597'0	598'0	597'0	598'0	597'0	598'0	597'0	598'0	597'0	598'0	597'0	598'0	597'0	598'0	597'0	598'0	597'0	598'0	597'0
591'2	590'0	589'0	593'6	578'4	569'8	573'8	580'0	578'5	583'8	581'0	583'8	581'0	583'8	581'0	583'8	581'0	583'8	581'0	583'8	581'0	583'8	581'0	583'8	581'0
588'0	586'8	583'4	583'1	585'0	583'2	585'1	585'1	583'8	581'0	585'1	583'8	581'0	585'1	583'8	581'0	585'1	583'8	581'0	585'1	583'8	581'0	585'1	583'8	581'0
616'0	610'0	616'4	543'5	542'5	542'0	549'0	428'0	567'5	576'9	552'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2	577'2
574'0	574'4	580'4	568'0	567'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4	569'4
580'0	580'4	580'0	573'2	573'5	579'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0	581'8	575'0
587'8	582'0	587'5	578'8	579'0	584'2	580'0	583'4	584'0	583'4	584'0	583'4	584'0	583'4	584'0	583'4	584'0	583'4	584'0	583'4	584'0	583'4	584'0	583'4	584'0
594'2	588'5	581'8	581'0	587'4	589'0	590'0	574'0	582'0	592'0	582'0	590'0	582'0	592'0	582'0	590'0	582'0	592'0	582'0	590'0	582'0	592'0	582'0	590'0	582'0
588'0	589'8	590'0	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7	591'7
586'4	590'2	589'0	595'0	594'2	592'5	588'8	590'0	589'6	590'0	589'6	590'0	589'6	590'0	589'6	590'0	589'6	590'0	589'6	590'0	589'6	590'0	589'6	590'0	589'6
597'0	586'8	561'0	572'0	583'0	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3	581'3
587'4	582'0	578'8	579'5	579'5	581'5	581'2	579'8	585'0	587'4	581'2	586'4	583'0	587'8	584'4	581'2	586'4	583'0	587'8	584'4	581'2	586'4	583'0	587'8	584'4
585'8	584'2	583'5	586'0	583'9	583'9	584'6	584'2	584'0	587'4	585'0	587'4	585'0	587'4	585'0	587'4	585'0	587'4	585'0	587'4	585'0	587'4	585'0	587'4	585'0
589'7	583'0	587'5	590'8	594'5	597'0	586'5	585'0	594'0	584'2	585'8	589'0	585'4	589'0	585'4	589'0	585'4	589'0	585'4	589'0	585'4	589'0	585'4	589'0	585'4
593'8	597'2	592'5	592'0	592'0	595'0	594'6	595'2	591'0	593'0	595'0	593'0	595'0	593'0	595'0	593'0	595'0	593'0	595'0	593'0	595'0	593'0	595'0	593'0	595'0
593'5	587'2	592'0	586'8	587'4	591'8	591'2	592'8	593'0	594'0	593'0	594'0	593'0	594'0	593'0	594'0	593'0	594'0	593'0	594'0	593'0	594'0	593'0	594'0	593'0
598'8	590'0	594'0	595'0	598'0	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4	590'4
587'8	592'0	597'0	593'0	598'0	600'2	600'2	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0	599'0
604'0	598'1	603'9	603'0	603'0	603'2	603'2	603'9	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0	605'0
610'0	604'0	603'7	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5	604'5
601'0	601'5	605'0	607'0	603'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0	604'0
614'2	607'0	609'0	593'4	590'8	603'8	604'8	607'1	606'0	605'0	606'0	605'0	606'0	605'0	606'0	605'0	606'0	605'0	606'0	605'0	606'0	605'0	606'0	605'0	606'0
602'4	602'0	605'4	606'1	606'0	599'0	599'0	606'0	606'4	607'2	609'6	609'4	608'5	608'5	608'5	608'5	608'5	608'5	608'5	608'5	608'5	608'5	608'5	608'5	608'5
593'75	591'64	591'21	590'12	590'00	590'92	590'45	590'92	591'35	591'74	591'20	593'49	590'41	590'41	590'41	590'41	590'41	590'41	590'41	590'41	590'41	590'41	590'41	590'41	590'41

TEMPERATURE OF THE BIPOLAR MAGNET.

73'8	73'8	73'0	72'6	72'2	71'6	71'0	70'0	69'2	68'7	68'5	67'7	70'52
76'5	76'5	75'8	75'0	74'4	73'8	73'3	72'9	72'2	71'4	70'8	70'0	73'19
78'5	78'5	77'5	76'6	75'3	74'8	74'8	74'8	74'8	74'8	74'8	74'8	74'87
77'8	77'4	77'0	76'4	76'1	75'5	75'3	74'6	74'4	74'0	73'7	73'2	75'52
77'1	76'9	76'0	75'6	75'4	74'9	74'5	74'0	73'7	73'2	73'0	72'4	74'69
79'4	79'2	78'5	77'8	77'0	76'2	75'1	75'1	74'6	74'0	73'8	73'6	75'85
79'6	79'2	79'0	78'5	78'2	77'6	77'5	77'2	77'0	76'0	76'5	75'0	77'48
79'4	79'6	79'2	79'0	79'0	78'8	78'8	78'0	77'6	77'5	77'0	76'4	78'50
79'4	79'0	78'5	78'4	78'0	77'8	77'8	77'8	77'8	77'8	77'8	77'8	77'8
80'4	80'0	80'1	80'0	79'2	78'6	78'2	78'0	77'6	77'3	77'2	76'8	78'39
80'0	79'2	78'3	77'2	77'0	76'2	75'5	74'7	73'9	73'1	72'8	72'5	77'58
73'2	73'0	72'6	72'0	71'6	71'4	70'7	70'4	70'0	69'5	69'2	68'7	72'03
74'4	74'0	73'5	73'2	73'0	72'7	72'5	72'1	72'0	71'5	71'2	70'8	72'04
77'8	77'6	77'0	76'6	76'4	76'0	75'7	75'4	75'3	75'0	74'6	74'2	75'61
80'0	79'6	79'4	79'2	79'0	78'6	78'6	78'6	78'6	78'6	78'6	78'6	78'6
81'0	81'7	81'9	81'5	80'9	80'4	80'0	79'6	79'0	78'6	78'5	78'0	80'55
80'0	79'6	79'2	78'8	78'6	78'1	78'0	77'8	77'4	77'2	77'0	76'6	78'61
79'0	78'5	78'0	77'5	77'4	77'2	76'9	76'6	76'4	76'3	76'0	75'7	77'47
79'0	78'0	77'4	76'7	76'0	75'0	74'7	74'2	73'6	73'0	72'4	71'9	76'43
74'4	74'9	74'2	74'0	73'6	72'8	72'0	72'0	71'0	70'8	70'2	70'0	72'92
72'1	72'4	71'8	71'6	71'4	71'2	71'0	70'8	70'6	70'4	70'2	70'0	71'87
69'0	69'1	68'0	67'5	67'1	66'6	66'0	65'6	65'2	64'2	64'0	63'5	67'75
67'5	67'5	67'6	66'9	66'6	66'9	66'4	66'2	65'0	64'5	64'5	64'0	66'20
69'1	69'0	68'8	68'0	67'5	67'0	66'5	66'0	65'5	65'0	64'5	64'0	66'58
70'3	70'3	70'0	69'5	69'0	68'8	68'5	68'1	68'2	67'7	67'5	67'1	68'40
69'0	69'0	68'5	68'4	68'2	67'6	67'4	67'0	66'7	66'3	65'8	65'4	67'36
69'5	69'4	68'6	68'1	68'0	67'5	67'1	66'7	66'2	65'9	65'5	65'0	67'39
75'99	75'92	74'96	74'52	74'12	73'61	73'32	72'84	72'32	72'03	71'69	71'22	71'64

HORIZONTAL FORCE.													12 <sup>h</sup> .
One Scale Division = '00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° F.													
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.	S. Dec.
2	610'0	610'2	610'2	603'0	597'0	592'5	593'0	598'2	601'2	603'5	609'5	613'1	609'0
3	614'0	610'0	603'0	601'0	593'8	589'8	592'0	600'1	597'8	608'9	607'0	601'8	603'7
4	611'8	618'8	610'1	608'6	606'1	602'4	603'2	604'1	613'7	608'4	614'6	611'0	615'0
5	575'0	567'0	566'6	550'0	579'0	578'5	549'0	582'5	591'0	605'0	583'5	587'5	588'0
6	594'0	588'2	589'5	587'5	583'0	578'0	575'0	581'0	600'0	603'0	597'0	599'8	578'2
7	598'2	596'0	577'5	572'5	580'0	572'5	575'0	581'4	588'2	601'8	608'0	603'2	618'2
8	—	—	—	—	—	—	—	—	—	—	—	—	—
9	593'0	597'0	592'5	585'0	580'3	579'8	587'3	595'0	603'1	606'0	621'0	599'0	602'0
10	596'2	595'8	585'0	583'1	582'4	582'0	581'8	590'0	593'5	598'0	596'5	592'5	596'0
11	597'0	594'0	586'0	578'2	578'0	578'0	580'0	583'5	591'0	591'2	596'0	591'5	600'2
12	603'0	595'0	583'0	573'5	572'5	577'5	580'0	586'0	591'0	602'0	602'5	601'8	598'2
13	602'2	602'0	593'0	582'0	571'0	566'5	568'0	575'8	587'0	592'8	603'2	600'8	601'2
14	609'5	597'0	578'8	572'2	556'0	551'0	581'2	602'2	597'6	597'9	592'8	596'5	587'0
15	—	—	—	—	—	—	—	—	—	—	—	—	—
16	594'2	593'0	593'0	587'9	576'5	566'5	575'8	579'0	588'8	595'0	600'0	594'2	590'5
17	609'8	609'8	600'0	594'5	581'4	577'0	581'0	581'5	605'0	596'0	594'0	603'5	602'5
18	607'0	606'0	599'8	593'5	587'5	585'0	587'5	592'5	606'0	607'5	597'5	612'2	601'2
19	610'0	612'5	607'5	602'0	600'8	598'0	606'0	619'0	618'8	620'2	612'2	608'0	607'2
20	607'0	605'5	600'0	598'6	597'0	601'2	600'5	601'5	605'9	600'5	600'8	604'0	604'2
21	614'8	610'0	600'2	590'0	587'0	590'5	597'2	609'8	612'2	611'0	621'0	599'6	606'2
22	—	—	—	—	—	—	—	—	—	—	—	—	—
23	600'8	598'0	591'5	583'0	576'0	573'5	582'8	591'0	597'5	601'5	601'0	600'0	597'5
24	597'0	595'0	589'0	582'8	575'0	573'0	582'0	591'0	596'5	601'4	601'8	602'1	594'4
25	595'5	585'0	568'5	571'0	569'0	552'0	573'0	569'6	598'4	596'2	595'0	590'6	590'0
26	600'0	599'0	611'9	599'0	580'8	579'8	583'8	592'1	599'0	608'0	597'8	608'0	601'0
27	601'0	598'8	601'2	583'2	579'0	580'0	579'6	586'7	603'0	605'5	615'0	617'0	599'0
28	597'0	595'0	586'0	580'0	570'0	571'8	571'2	582'8	591'5	598'8	609'0	606'0	598'0
29	—	—	—	—	—	—	—	—	—	—	—	—	—
30 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
31 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	601'62	599'11	592'45	586'05	581'75	579'48	582'87	591'76	599'32	602'67	603'57	601'96	599'56

TEMPERATURE OF THE BATH OR MAGNET.													12 <sup>h</sup> .
	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
2	65'1	66'0	66'0	68'0	68'5	68'5	69'0	69'8	70'2	70'4	71'0	71'0	71'2
3	65'9	66'4	67'0	68'0	69'0	69'8	69'8	69'6	70'0	70'6	71'0	71'0	71'4
4	66'8	67'4	68'2	69'6	69'6	71'4	71'5	71'9	72'1	73'1	73'7	73'5	73'5
5	68'1	69'0	70'0	71'4	72'4	73'4	73'1	73'5	74'0	74'5	74'5	74'2	74'0
6	68'8	69'2	70'5	71'5	71'0	71'0	71'5	71'4	73'0	73'8	76'5	76'0	74'4
7	69'5	69'5	70'5	70'2	70'6	71'5	72'2	72'6	72'9	73'2	73'4	73'1	73'0
8	—	—	—	—	—	—	—	—	—	—	—	—	—
9	67'4	67'5	67'5	68'0	68'5	69'6	70'2	71'1	72'6	74'0	75'0	80'7	75'3
10	70'6	70'6	70'6	71'2	72'5	71'0	74'5	74'4	75'4	75'5	75'8	76'0	75'5
11	72'4	72'4	72'6	72'5	73'0	72'5	73'0	73'5	73'5	73'5	73'5	71'5	71'0
12	69'0	69'0	69'0	70'0	71'0	72'0	73'0	73'5	74'0	74'8	75'1	74'6	74'0
13	71'5	71'8	72'8	74'0	74'6	75'5	76'0	75'4	76'2	76'3	75'6	75'7	76'0
14	72'6	73'0	73'4	74'4	75'4	75'6	76'0	76'8	77'1	78'0	77'9	77'5	77'8
15	—	—	—	—	—	—	—	—	—	—	—	—	—
16	71'1	71'8	73'4	76'4	77'3	78'1	78'6	79'3	79'7	80'2	80'2	80'0	81'0
17	74'5	75'2	75'5	76'2	76'0	76'5	76'4	76'0	76'5	76'5	76'0	76'0	76'0
18	69'6	69'4	69'5	70'5	70'5	70'0	70'0	70'1	70'3	70'5	71'0	70'7	70'0
19	61'5	65'0	61'0	61'0	61'7	65'2	65'5	65'5	65'6	66'5	67'0	67'2	67'8
20	65'0	65'0	64'7	65'4	66'5	67'0	67'9	68'5	68'8	69'6	69'9	70'0	70'0
21	61'8	65'2	66'0	66'6	67'3	67'5	67'7	68'0	68'4	69'7	70'5	70'8	71'8
22	—	—	—	—	—	—	—	—	—	—	—	—	—
23	65'4	66'5	67'5	68'1	69'2	69'5	70'0	70'0	70'8	71'0	71'5	71'5	71'5
24	65'7	66'0	66'4	66'9	68'0	68'5	69'0	70'0	70'4	71'2	71'6	72'2	72'1
25	65'8	65'8	67'5	68'5	70'0	70'8	71'3	71'8	72'6	73'5	73'4	73'5	73'6
26	68'0	67'0	67'0	68'0	68'6	69'6	70'1	71'5	72'1	73'0	74'0	73'2	73'0
27	69'2	68'8	68'5	69'0	68'9	69'1	68'8	69'0	69'4	69'8	70'5	70'4	70'7
28	66'3	66'9	68'5	68'8	69'5	69'7	69'8	69'7	70'0	70'7	71'0	71'5	71'6
29	—	—	—	—	—	—	—	—	—	—	—	—	—
30 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
31 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	68'37	68'61	69'12	69'89	70'65	71'27	71'65	71'95	72'11	73'01	73'32	73'55	73'37

<sup>a</sup> The 30th and 31st days are omitted from the Means, the readings having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's anemometer.



HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
2 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
3	602'0	601'2	600'7	593'0	588'0	593'0	594'0	599'5	606'0	601'0	623'0	623'0	606'0
4	606'2	596'0	598'0	593'5	591'0	596'5	603'0	602'0	607'0	611'5	616'0	611'5	615'0
5	—	—	—	—	—	—	—	—	—	—	—	—	—
6	615'0	610'2	605'5	593'0	583'0	585'0 <sup>b</sup>	586'0	592'0	602'5	600'2	612'8	614'2	617'0
7	611'0	606'2	602'0	589'8	578'2	584'0	586'8	596'8	607'0	609'8	615'7	610'0	611'5
8	611'8	605'5	597'7	587'0	579'4	576'0	581'6	590'0	598'0	604'1	604'0	606'0	606'5
9	621'4	601'0	595'0	591'5	593'8	580'0	595'6	588'5	600'0	617'0	618'0	600'0	611'0
10	600'4	600'0	590'8	592'0	586'0	585'0	592'0	607'0	616'0	620'5	617'0	622'8	621'8
11	610'5	605'0	598'5	588'5	579'5	575'0	580'0	586'8	595'8	605'8	612'5	612'0	611'9
12	—	—	—	—	—	—	—	—	—	—	—	—	—
13	598'5	582'0	573'0	584'0	557'2	574'2	571'0	581'6	608'2	600'2	604'8	610'4	599'0
14	621'2	617'8	608'0	600'0	597'0	601'1	608'5	615'0	624'0	624'0	624'2	620'5	627'5
15	620'9	616'1	607'0	596'0	590'0	594'0	598'0	604'0	611'0	614'0	617'0	620'0	619'8
16	627'0	626'0	625'0	615'0	598'0	591'0	589'0	591'5	605'0	610'0	625'5	620'4	622'4
17	614'0	613'0	608'0	598'0	583'0	579'0	586'0	591'2	594'8	601'0	603'4	606'0	611'0
18	613'0	607'5	597'8	585'4	578'0	582'5	582'2	586'1	596'8	595'6	606'5	608'5	612'2
19	—	—	—	—	—	—	—	—	—	—	—	—	—
20	617'8	614'2	606'8	596'8	585'0	586'1	594'8	594'0	600'4	618'0	621'0	619'0	612'2
21	615'8	612'2	604'0	598'9	592'0	588'0	593'0	603'0	615'0	619'0	618'0	616'5	615'0
22	617'0	618'0	612'5	600'0	600'0	601'5	601'5	607'0	631'0	620'0	607'4	613'8	615'0
23	614'0	608'0	603'4	602'2	605'0	602'5	611'0	619'0	605'0	612'5	613'0	623'1	609'1
24	597'0	—	—	—	—	—	—	—	—	—	—	—	—
25	570'3	563'0	557'0	548'1	546'1	546'2	555'0	572'2	581'0	585'0	583'0	586'5	584'0
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	598'0	577'7	475'8	518'5	545'4	557'5	551'0	563'5	597'5	602'0	592'0	580'0	584'0
28	582'0	577'5	574'0	561'0	560'0	565'0	572'5	581'5	598'0	598'5	590'2	592'2	580'0
29	600'5	602'0	596'5	593'0	589'0	577'2	543'0	608'0	616'0	631'2	646'8	612'0	598'7
30	602'5	605'0	600'0	593'4	584'8	580'0	578'2	576'2	583'1	605'8	609'2	606'5	610'0
Hourly Means	608'63	603'97	598'65	590'91	581'23	583'90	586'41	594'86	604'30	609'42	613'51	612'86	610'10
TEMPERATURE OF THE DIUTER MAGNET.													
	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	°	°	°	°	°	°	°	°	°	°	°	°	°
1 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
2 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
3	66'5	66'6	66'7	66'7	67'7	68'5	69'0	70'0	70'3	71'3	71'7	71'4	71'0
4	66'7	65'4	65'3	65'0	65'0	65'2	65'2	65'2	65'2	65'2	65'2	65'1	65'1
5	—	—	—	—	—	—	—	—	—	—	—	—	—
6	62'1	62'5	63'5	65'0	65'0	65'0	65'3	65'6	66'2	66'8	67'4	67'6	67'9
7	63'7	64'2	65'2	66'6	67'6	68'2	68'4	68'6	68'7	68'9	68'7	68'5	68'5
8	66'4	66'6	67'4	67'6	68'6	70'0	70'9	71'5	71'7	72'0	72'0	72'0	72'0
9	65'8	65'5	65'2	65'0	64'9	65'4	65'4	65'6	66'0	65'8	66'0	66'1	66'2
10	61'5	61'7	62'2	63'0	63'7	64'2	64'3	65'0	65'4	66'0	66'4	66'4	66'6
11	60'1	60'0	62'0	62'7	64'5	64'0	64'4	64'6	65'2	65'6	66'2	66'4	66'4
12	—	—	—	—	—	—	—	—	—	—	—	—	—
13	62'7	62'5	62'5	62'6	62'5	62'8	62'5	62'5	62'3	62'0	61'4	60'5	60'2
14	59'5	56'2	56'4	56'5	56'7	57'0	57'2	57'4	57'8	58'2	58'9	58'9	59'5
15	54'2	55'0	55'7	57'2	57'8	58'2	58'8	59'3	59'8	60'5	61'7	62'5	63'0
16	56'4	57'0	57'5	58'8	60'0	61'0	61'4	61'9	62'0	63'0	64'0	64'3	64'0
17	59'5	59'3	59'8	60'9	62'2	63'3	63'9	64'4	64'8	65'2	65'5	65'5	64'8
18	62'9	63'0	63'3	63'6	64'0	64'2	64'5	64'5	64'6	64'6	65'0	64'6	64'7
19	—	—	—	—	—	—	—	—	—	—	—	—	—
20	60'8	61'2	61'2	61'4	61'5	61'7	62'0	62'4	62'5	62'4	62'8	62'8	62'5
21	60'0	60'2	60'8	61'7	62'0	62'3	62'9	63'3	63'5	64'2	64'9	65'4	65'5
22	57'5	58'0	59'0	60'0	60'5	61'2	61'8	62'4	62'6	63'5	64'2	64'8	64'8
23	60'5	60'5	61'3	62'2	63'0	63'8	64'0	64'5	65'3	66'5	67'0	67'4	67'1
24	63'5	—	—	—	—	—	—	—	—	—	—	—	—
25	61'0	59'2	59'0	59'2	59'5	60'0	60'3	60'7	61'0	60'9	61'1	61'0	61'2
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	62'1	62'5	62'7	63'0	63'5	64'0	64'5	65'5	66'2	67'5	68'3	68'5	68'0
28	61'7	61'5	61'6	62'1	62'1	62'6	62'6	62'4	62'7	62'7	62'4	62'2	62'0
29	56'8	56'5	56'9	57'0	57'4	57'4	58'0	58'6	58'4	58'1	58'8	58'6	58'5
30	55'0	55'0	55'0	57'2	58'0	58'1	58'8	59'0	59'0	59'0	59'4	59'7	59'8
Hourly Means	60'79	60'80	61'29	61'89	62'40	62'92	63'21	63'61	63'86	64'21	64'59	64'62	64'60

\* The observations on the 1st and 2d days are omitted from the Means, the readings having been affected to an uncertain amount (up to four hours on the 2d) by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

<sup>b</sup> Eight minutes lat.





HORIZONTAL FORCE.													12h.
One Scale Division = '000087 parts of the H. F.													
Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
Mean (Göttingen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	612'2	610'0	611'8	603'8	593'2	592'0	592'0	598'0	600'5	604'2	615'0	606'0	608'0
2	616'4	616'8	613'0	602'0	594'0	609'2	613'0	604'5	613'0	608'3	611'0	610'0	612'0
3	—	—	—	—	—	—	—	—	—	—	—	—	—
4	622'0	620'0	620'0	619'0	613'5	611'0	605'0	613'0	616'5	616'1	617'0	621'0	620'2
5	623'5	618'0	609'0	600'0	600'0	605'0	610'0	614'0	611'2	619'0	622'8	606'0	613'0
6	617'5	613'0	603'2	599'2	592'0	593'0	598'2	603'0	609'6	613'1	611'8	613'6	614'8
7	615'8	610'2	601'4	597'6	592'0	592'0	598'0	612'2	612'8	618'2	619'2	622'0	620'0
8	607'2	603'7	604'0	597'0	595'0	596'2	599'5	610'0	622'5	619'0	608'0	613'0	620'0
9	617'8	615'0	609'0	605'0	595'0	601'5	603'0	602'0	608'0	618'0	621'0	627'2	614'6
10	—	—	—	—	—	—	—	—	—	—	—	—	—
11	618'8	616'5	610'0	607'0	599'0	599'0	604'0	611'5	611'2	607'2	624'0	624'4	625'8
12	630'8	623'0	613'0	614'2	605'8	607'5	615'0	624'0	626'0	619'2	617'2	627'8	628'6
13	625'0	611'0	510'0	567'0	589'0	595'0	617'0	610'0	610'0	611'0	613'0	599'0	609'0
14	616'4	611'0	606'2	591'0	603'5	603'8	599'0	610'0	611'0	615'5	618'5	620'0	621'5
15	626'8	626'0	622'0	614'0	603'0	607'5	604'0	614'5	613'0	620'0	621'0	620'2	611'0
16	619'5	618'8	613'0	612'0	605'7	597'5	609'0	615'0	608'2	619'5	620'2	620'9	624'1
17	—	—	—	—	—	—	—	—	—	—	—	—	—
18	619'2	612'0	611'0	592'2	601'2	604'2	602'9	599'0	600'1	606'0	601'3	607'8	611'2
19	613'0	600'0	596'0	590'1	606'5	592'4	584'0	598'7	597'3	601'0	605'0	611'2	613'0
20	621'0	618'2	607'0	605'0	599'7	597'0	601'2	607'0	604'0	612'5	619'0	621'6	618'0
21	621'0	617'5	614'8	611'0	603'8	594'1	600'0	604'0	611'0	619'5	620'2	623'0	625'0
22	630'5	625'5	618'0	619'0	613'0	609'0	608'0	613'8	620'2	625'8	626'6	619'0	621'0
23	403'0	38'0	423'3	399'6	387'4	522'6	627'7	600'7	607'0	525'4	577'7	630'0	632'0
24	—	—	—	—	—	—	—	—	—	—	—	—	—
25	585'3	551'2	460'0	503'8	514'2	590'6	597'5	551'0	628'0	590'0	606'0	601'5	586'0
26	607'0	601'0	598'8	595'0	591'4	589'0	597'0	602'5	606'5	608'5	609'6	604'0	617'5
27	628'0	624'0	616'0	607'8	600'4	596'5	599'0	603'0	612'2	618'0	622'0	627'5	630'2
28	633'5	629'0	623'4	615'0	604'0	600'0	606'5	615'0	622'0	623'0	626'0	632'0	630'0
29	620'0	610'0	611'0	628'0	618'8	612'2	610'5	602'0	609'7	616'0	620'8	623'0	623'0
30	631'5	629'4	622'0	617'9	607'0	601'0	609'2	614'0	619'0	622'7	626'0	621'5	625'6
31	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	619'95	616'96	610'85	605'63	601'25	600'26	602'73	608'01	611'29	614'80	617'25	618'53	619'41
TEMPERATURE OF THE BUIAR MAGNET.													
1	57'4	58'2	59'0	59'0	58'7	59'0	59'0	59'0	59'2	59'4	59'8	59'9	59'8
2	54'2	51'4	55'2	56'7	57'8	58'2	59'0	59'8	60'6	61'9	62'2	62'5	62'0
3	—	—	—	—	—	—	—	—	—	—	—	—	—
4	55'0	55'4	56'4	58'2	59'0	59'6	60'3	61'2	61'7	62'2	62'4	62'4	62'1
5	60'0	60'0	60'0	60'5	60'7	61'5	62'5	62'9	63'7	61'8	65'3	65'2	61'6
6	61'5	61'5	61'4	61'2	61'3	61'4	61'8	62'0	61'9	62'1	62'1	62'0	61'9
7	62'4	61'9	61'8	61'6	61'5	61'7	61'9	61'9	61'7	61'7	61'8	61'8	61'8
8	62'1	62'1	62'1	62'1	62'4	62'8	63'0	63'0	63'0	63'0	63'2	63'0	63'2
9	58'9	58'0	59'8	60'2	60'8	60'8	60'9	60'9	61'0	61'7	62'0	62'0	61'7
10	—	—	—	—	—	—	—	—	—	—	—	—	—
11	54'2	54'6	55'5	56'4	56'3	56'5	56'5	57'0	57'4	57'5	57'6	57'8	57'6
12	51'5	54'5	51'5	51'6	55'0	55'2	55'3	55'0	54'4	54'6	54'8	54'5	51'5
13	53'4	53'2	53'3	53'5	53'4	53'5	53'6	53'9	54'4	54'5	55'0	55'3	55'3
14	50'8	50'2	50'0	50'9	51'4	52'2	52'8	53'3	53'4	53'5	53'5	53'5	53'0
15	47'4	47'3	47'5	47'0	48'5	50'0	50'8	51'0	51'4	51'8	51'9	52'0	51'7
16	50'9	51'0	51'9	52'9	54'0	54'5	55'0	55'8	56'4	57'4	58'0	58'0	57'9
17	—	—	—	—	—	—	—	—	—	—	—	—	—
18	56'1	55'5	56'5	57'4	57'6	58'8	59'4	60'2	61'5	62'5	63'0	62'9	62'9
19	59'4	58'6	59'6	59'5	59'5	60'0	60'0	60'4	61'0	61'5	61'9	61'1	61'0
20	51'0	53'4	53'8	54'0	55'7	56'5	57'0	57'3	57'5	58'6	59'5	59'5	59'5
21	55'4	54'3	54'0	54'4	54'6	55'1	55'1	55'5	55'5	55'9	55'5	55'4	55'0
22	52'5	52'0	51'9	51'9	51'9	52'4	52'5	52'6	52'8	53'2	53'4	53'0	52'6
23	52'9	52'6	52'6	53'1	54'1	54'9	55'5	55'8	56'8	57'8	59'0	59'0	58'8
24	—	—	—	—	—	—	—	—	—	—	—	—	—
25	55'6	55'4	55'6	55'5	56'1	56'3	56'1	56'6	56'5	56'1	55'6	54'5	53'6
26	49'0	49'0	49'4	49'4	49'6	49'8	50'1	50'1	49'8	50'3	50'3	49'5	49'0
27	43'9	43'4	43'5	44'3	45'4	45'8	46'1	46'9	47'7	48'4	48'4	48'6	48'8
28	44'8	44'5	45'8	47'0	48'3	49'0	49'4	49'7	50'6	51'7	51'8	51'6	51'3
29	48'1	48'5	48'7	49'3	51'3	52'2	52'5	53'0	53'6	54'2	55'1	54'3	54'5
30	52'0	51'4	51'4	52'2	53'0	54'0	55'0	55'7	55'7	56'2	56'6	56'3	56'4
31	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	54'18	53'99	54'40	54'95	55'56	56'12	56'52	56'89	57'21	57'77	58'03	57'90	57'74

\* Not included in the Means, on account of disturbance.

1' 63.

0h.	11h.
—	—
5'0	606'0
1'0	610'0
—	—
7'0	621'0
22'8	606'0
1'8	613'6
9'2	622'0
8'0	613'0
21'0	627'2
—	—
24'0	624'4
17'2	627'8
13'0	599'0
18'5	620'0
21'0	620'2
20'2	620'9
—	—
01'3	607'8
05'0	611'2
19'0	621'6
20'2	623'0
26'6	619'0
77'7	630'0
—	—
06'0	601'5
09'6	608'0
22'0	627'5
26'0	632'0
20'8	623'0
26'0	621'5
—	—
617'25	618'53

HORIZONTAL FORCE.													Daily and Monthly Means.
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.		
Sc. Div. 608'0	Sc. Div. 612'8	Sc. Div. 614'5	Sc. Div. 615'0	Sc. Div. 612'0	Sc. Div. 610'8	Sc. Div. 613'5	Sc. Div. 616'8	Sc. Div. 616'6	Sc. Div. 616'8	Sc. Div. 618'2	Sc. Div. 618'0	Sc. Div. 609'00	
612'0	613'5	614'0	615'0	615'2	615'0	620'0	621'0	622'0	622'8	623'4	621'2	613'60	
620'2	620'5	620'0	620'0	619'3	622'1	619'8	620'2	620'0	620'8	620'8	623'0	618'37	
613'0	612'4	614'2	615'0	613'2	613'0	615'2	614'0	615'0	615'5	616'8	616'0	612'99	
614'8	616'0	615'8	618'5	619'0	617'0	619'0	616'0	616'0	615'5	618'0	619'4	611'34	
620'0	619'8	619'5	620'5	621'0	632'0	623'0	627'2	614'8	607'8	612'2	616'6	613'70	
620'0	607'0	607'5	611'4	616'8	604'2	612'7	615'0	615'4	614'2	615'0	615'2	609'56	
614'6	623'4	609'1	609'0	614'8	616'1	—	—	—	—	—	—	613'69	
—	—	—	—	—	619'0	618'4	618'0	621'4	619'8	622'5	—	613'69	
625'8	625'8	621'0	622'0	621'8	623'0	620'0	624'8	628'0	629'0	629'0	630'0	617'91	
628'6	635'0	631'2	626'0	615'4	611'5	609'0	595'5	601'0	604'0	606'0	600'2	616'12	
609'0	605'0	608'0	612'0	612'0	612'5	613'0	611'2	616'4	617'0	619'7	619'0	606'03	
621'5	621'0	620'0	617'5	621'8	624'2	621'0	626'9	627'0	626'0	628'8	630'0	616'44	
611'0	616'2	620'4	621'1	621'0	628'0	628'3	625'0	624'8	623'0	622'2	628'5	619'48	
624'1	606'1	622'3	619'6	620'0	620'4	—	—	—	—	—	—	613'88	
611'2	609'7	610'0	611'5	610'0	615'5	615'9	611'5	611'9	614'5	616'2	616'5	609'05	
613'0	611'7	613'0	606'5	613'0	605'9	615'0	616'2	618'0	620'2	620'1	621'2	607'18	
618'0	618'0	617'2	611'8	611'0	609'5	611'0	609'0	615'3	616'0	615'5	620'5	611'92	
625'0	625'8	626'8	627'1	627'6	628'0	629'0	629'0	629'2	632'0	631'8	630'0	620'05	
624'0	614'4	619'0	619'0	618'0	611'0	632'8	611'3	583'0	503'0	222'5	480'5	592'37	
632'0	594'0	581'0	565'5	513'0	565'0	—	—	—	—	—	—	481'35	
—	—	—	—	—	—	187'0	366'0	108'8	479'0	431'2	551'5	—	
586'0	590'0	592'5	596'0	599'0	600'0	603'0	598'2	602'4	603'8	605'0	606'9	583'12	
617'5	619'8	621'0	620'2	620'0	618'8	622'2	621'6	621'2	625'5	626'8	628'5	611'72	
630'2	627'8	630'2	628'7	631'1	633'0	628'0	629'4	629'0	630'8	631'0	631'0	621'41	
630'0	630'9	630'0	631'0	632'8	633'0	632'4	633'0	633'0	632'0	621'5	628'0	629'13	
623'0	618'8	621'5	626'0	626'0	621'6	620'2	627'0	627'5	615'0	616'2	620'1	625'21	
625'6	618'8	623'0	624'0	621'0	625'2	—	—	—	—	—	—	621'04	
—	—	—	—	—	—	622'2	625'0	624'2	623'0	625'8	622'0	—	
619'41	619'24	619'07	619'04	619'55	619'51	619'74	619'20	619'95	620'50	619'91	621'49	615'17	

59'8	59'9
62'2	62'5
—	—
62'4	62'4
65'3	65'2
62'1	62'0
61'8	61'8
63'2	63'0
62'0	62'0
—	—
57'6	57'8
54'8	54'5
55'0	55'3
53'5	53'5
51'9	52'0
58'0	58'0
—	—
63'0	62'9
61'9	61'1
59'5	59'5
55'5	55'4
53'4	53'0
59'0	59'0
—	—
55'6	54'5
50'3	49'5
48'4	48'6
51'8	51'6
55'1	54'3
56'6	56'3
—	—
58'03	57'90

TEMPERATURE OF THE BIPOLAR MAGNET.												
59'8	59'5	59'2	58'0	57'6	57'0	56'9	56'6	56'4	56'2	55'6	54'9	58'14
62'0	61'1	60'5	60'2	60'0	59'5	—	—	—	—	—	—	58'47
—	—	—	—	—	57'0	56'6	56'4	56'2	55'9	55'5	55'3	60'15
62'4	61'6	61'1	61'2	61'0	61'0	60'6	60'4	60'2	60'2	60'1	61'8	62'70
65'3	61'4	61'0	63'8	63'6	63'2	63'0	62'5	62'5	62'2	62'2	61'8	61'78
62'1	61'7	61'7	61'7	61'7	61'8	62'0	62'0	62'0	62'0	62'0	62'1	61'88
61'8	61'5	61'5	61'5	61'9	61'9	62'0	62'0	61'9	62'3	62'6	62'5	61'88
63'2	63'2	63'0	62'4	61'8	61'4	61'2	61'2	60'6	60'1	59'5	59'3	62'03
62'0	61'4	61'0	61'0	60'5	60'2	—	—	—	—	—	—	—
—	—	—	—	—	—	56'0	55'8	55'6	55'4	55'4	55'4	59'43
57'6	57'1	56'6	56'4	56'2	55'5	55'2	54'5	54'5	54'3	54'3	54'3	55'99
54'8	54'5	54'4	54'3	54'1	54'0	53'8	53'7	53'5	53'4	53'4	53'4	54'33
55'0	55'3	55'3	53'8	53'0	52'6	52'5	52'2	51'8	51'7	51'5	51'0	53'52
53'5	51'6	51'0	50'6	50'3	50'3	49'8	49'1	48'5	48'0	47'6	47'4	50'65
51'9	51'8	51'6	51'5	51'1	51'4	51'0	50'8	50'6	50'7	50'6	50'8	50'43
58'0	57'4	57'0	56'8	56'7	56'5	—	—	—	—	—	—	55'81
—	—	—	—	—	—	57'3	57'0	57'0	56'9	56'8	56'4	—
63'0	62'5	62'4	62'1	61'6	61'3	61'1	61'0	61'0	61'0	60'5	60'2	60'38
61'9	59'8	59'5	58'8	58'6	58'0	58'0	57'7	57'2	56'6	55'8	54'9	59'06
59'5	59'5	59'5	59'2	58'8	58'2	57'5	57'3	57'0	56'5	56'4	55'7	57'16
55'5	51'6	51'0	53'6	53'2	52'6	52'4	52'2	51'9	52'0	52'0	52'5	54'03
53'4	52'3	52'1	52'3	52'1	52'2	52'2	52'2	52'4	52'3	52'3	52'3	52'39
59'0	57'9	57'7	57'4	56'6	56'2	—	—	—	—	—	—	—
—	—	—	—	—	—	53'7	54'0	54'3	54'5	55'0	55'6	55'66
55'6	53'0	52'7	52'5	52'3	51'9	51'5	51'3	51'0	50'7	50'3	49'8	53'80
50'3	48'5	48'0	47'8	47'6	47'0	46'4	45'5	45'0	44'7	44'5	44'1	48'10
48'4	48'5	48'2	47'5	47'0	46'7	46'7	46'4	46'3	46'0	45'8	45'5	46'49
51'8	50'0	50'0	49'5	49'2	49'2	49'0	48'8	49'0	49'0	49'1	48'0	49'01
55'1	54'3	54'1	54'0	53'7	53'5	53'2	52'6	52'5	52'5	52'5	52'3	52'52
56'6	56'1	55'6	55'1	55'0	55'0	—	—	—	—	—	—	—
—	—	—	—	—	—	52'9	53'0	53'4	53'6	54'0	53'9	54'31
—	—	—	—	—	—	—	—	—	—	—	—	—
57'74	57'30	57'01	56'68	56'42	56'15	55'59	55'30	55'14	54'99	54'85	54'59	56'05

HORIZONTAL FORCE.													12h.
One Scale Division = '000087 parts of the H. F.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.
Mean Galtin- gen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	617.0	615.9	585.0	573.0	610.5	616.0	594.5	606.0	603.8	610.0	620.0	613.0	602.6
2	605.2	605.0	601.2	600.0	597.0	597.5	596.0	599.0	602.4	600.5	602.2	598.8	599.9
3	610.0	610.0	610.0	609.0	600.0	593.0	591.8	598.2	607.2	605.4	607.2	609.7	610.5
4	623.5	620.0	616.0	609.2	602.0	597.2	595.8	596.1	606.0	605.0	601.0	611.0	613.4
5	623.2	620.0	622.8	614.1	608.1	605.1	610.6	615.0	618.9	620.0	621.0	628.0	627.5
6	631.0	627.8	622.2	612.7	608.0	617.5	605.0	612.0	630.0	621.5	621.5	626.0	629.0
7	—	—	—	—	—	—	—	—	—	—	—	—	—
8	637.0	623.0	621.0	621.4	620.5	612.5	609.5	615.0	610.5	609.0	621.0	633.8	630.2
9	633.0	622.5	615.0	605.0	605.4 <sup>b</sup>	596.0	593.0	592.5	606.2	614.4	608.8	613.1	610.0
10	625.0	627.0	623.0	614.0	601.2	596.5	598.0	606.2	610.0	605.8	613.6	614.0	622.4
11	630.0	624.4	618.2	607.0	596.0	590.3	593.2	599.0	608.5	618.0	623.0	620.4	623.0
12	633.1	630.3	623.0	615.0	607.0	601.2	603.2	609.0	617.0	624.5	632.0	636.0	631.5
13	638.0	632.4	628.0	621.5	615.0	597.5	597.0	617.0	613.0	622.0	636.0	625.0	622.0
14	—	—	—	—	—	—	—	—	—	—	—	—	—
15	639.0	638.0	632.5	621.0	619.0	604.0	609.0	616.2	620.0	629.6	636.0	638.0	637.0
16	649.5	650.0	635.0	618.2	619.0	614.8	608.2	605.0	610.0	605.8	613.6	614.0	629.0
17	631.8	630.6	625.0	614.0	608.2	607.2	605.0	602.0	615.0	621.0	629.0	624.5	620.5
18	634.0	626.6	618.0	617.0	623.5	622.0	621.2	621.5	624.0	620.8	632.0	628.5	621.0
19	630.8	631.0	624.5	619.0	615.0	610.0	614.0	621.0	635.0	665.0	622.4	625.7	632.2
20 <sup>c</sup>	630.5	650.0	627.0	637.4	609.0	608.0	610.0	622.2	635.8	636.8	641.2	641.3	638.0
21	—	—	—	—	—	—	—	—	—	—	—	—	—
22 <sup>c</sup>	650.0	646.5	610.0	631.0	625.2	592.8	644.5	627.5	661.0	649.0	648.0	659.0	616.0
23	604.2	601.2	598.8	596.0	593.0	595.0	594.0	599.0	602.5	596.0	600.5	598.0	601.3
24	604.4	604.0	602.0	594.5	586.7	584.0	586.5	593.0	601.0	607.0	608.7	596.0	624.5
25 <sup>c</sup>	604.0	604.8	607.0	598.5	600.0	602.0	583.0	576.0	597.0	599.0	632.2	643.8	636.8
26	604.5	604.5	575.0	606.0	604.0	598.0	596.0	604.2	609.2	621.0	623.9	610.0	621.3
27	631.4	630.2	627.0	615.8	615.0	619.0	615.3	615.0	624.0	628.8	633.5	612.5	626.0
28	—	—	—	—	—	—	—	—	—	—	—	—	—
29	657.2	652.0	652.0	646.5	642.3	638.0	633.0	641.0	642.0	648.0	651.0	652.0	651.0
30	658.2	656.0	651.3	647.5	645.0	638.0	638.0	642.0	641.0	643.0	647.0	651.0	653.0
Hourly Means	628.17	625.32	618.67	612.93	610.50	606.53	604.69	606.91	615.83	620.44	622.37	621.43	623.69
TEMPERATURE OF THE BIFILAR MAGNET.													
1	53.9	51.0	54.1	54.4	55.0	55.3	56.4	56.7	57.3	57.9	58.6	58.4	58.2
2	57.2	57.2	57.1	57.4	58.8	59.3	59.9	60.3	60.9	61.5	62.0	62.0	61.4
3	58.6	58.3	58.5	58.5	59.0	59.2	59.7	60.1	60.2	60.4	60.0	60.0	60.0
4	57.8	57.2	57.2	58.5	58.6	59.4	59.7	60.0	60.0	60.1	61.0	60.8	60.5
5	54.4	53.8	53.4	54.4	53.6	54.1	54.5	54.7	54.9	55.8	56.0	55.0	54.8
6	51.1	50.6	51.0	51.5	51.6	51.9	52.3	52.3	52.8	53.5	53.7	53.1	53.0
7	—	—	—	—	—	—	—	—	—	—	—	—	—
8	49.4	50.0	49.9	50.0	50.5	51.1	51.6	52.4	52.8	53.4	53.7	53.9	53.8
9	55.8	56.2	56.2	56.2	56.5	57.0	57.5	57.8	58.4	59.2	59.3	59.1	58.7
10	52.2	52.2	52.0	52.4	52.3	52.4	52.5	52.6	52.7	52.6	52.5	52.0	52.3
11	50.4	50.0	50.0	50.0	49.8	50.5	51.2	51.4	51.3	51.0	51.2	51.0	51.0
12	49.4	48.4	49.0	49.4	49.8	50.0	50.8	50.9	51.1	51.2	50.7	50.5	50.6
13	49.2	49.0	49.0	49.7	49.9	50.7	51.0	51.5	51.7	52.0	52.0	51.8	51.8
14	—	—	—	—	—	—	—	—	—	—	—	—	—
15	47.2	47.3	47.4	47.9	48.5	49.5	49.5	49.6	50.5	50.0	49.7	49.1	49.4
16	47.0	47.0	47.0	47.4	47.6	48.4	49.2	50.0	50.3	51.0	51.1	51.2	51.3
17	53.2	53.0	53.0	52.7	53.0	53.6	54.0	54.2	54.2	54.9	54.9	55.3	56.0
18	54.2	54.0	53.6	53.2	53.5	53.8	54.0	54.0	53.6	54.1	54.3	54.0	54.4
19	51.3	51.0	50.4	49.5	48.8	48.8	48.3	48.2	48.0	47.8	47.0	47.0	47.8
20 <sup>c</sup>	42.5	42.5	43.0	43.9	44.4	45.2	46.0	46.2	46.6	47.1	47.2	46.4	46.0
21	—	—	—	—	—	—	—	—	—	—	—	—	—
22 <sup>c</sup>	45.7	46.0	46.4	47.0	47.4	48.7	49.8	50.4	51.2	51.6	52.2	52.5	52.9
23	51.6	51.0	50.8	50.6	50.6	51.6	52.0	52.8	53.2	54.2	54.4	54.4	54.9
24	55.5	55.4	55.4	55.0	55.2	55.8	56.0	56.1	56.2	56.3	56.5	56.4	57.0
25 <sup>c</sup>	54.2	54.2	53.9	53.9	54.8	55.0	55.0	54.8	54.5	54.5	54.6	54.0	54.2
26	49.0	48.0	47.4	47.0	46.9	47.3	47.5	47.4	46.8	46.5	46.9	46.9	47.0
27	45.6	45.5	44.9	44.7	45.2	46.0	46.2	46.2	46.6	47.2	47.0	45.7	45.5
28	—	—	—	—	—	—	—	—	—	—	—	—	—
29	34.5	34.4	34.2	34.2	34.1	35.1	35.6	36.5	37.5	38.2	39.0	38.8	38.6
30	35.8	35.8	35.5	36.1	37.7	38.5	39.4	39.8	40.0	40.8	41.2	41.2	41.9
Hourly Means	50.62	50.40	50.30	50.42	50.72	51.27	51.69	51.98	52.22	52.59	52.73	52.50	52.60

\* Thirteen minutes late.

<sup>b</sup> Two minutes late.<sup>c</sup> Not included in the Means, on account of disturbance.

e. 1'63.

10 <sup>h</sup> .	11 <sup>h</sup> .
620°0	613°0
602°2	598°8
607°2	609°7
601°0	611°0
624°0	628°0
621°5	626°0
621°0	633°8
608°8	613°1
613°6	614°0
623°0	620°4
632°0	636°0
636°0	625°0
636°0	638°0
617°1	629°0
629°0	623°5
632°0	628°5
622°4	625°7
641°2	641°3
618°0	659°0
600°5	598°0
608°7	596°0
632°2	643°8
623°9	610°0
633°5	612°5
631°0	652°0
647°0	651°0
622°37	621°43

HORIZONTAL FORCE.  
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
630°2	612°0	617°2	591°4	554°0	582°0	580°2	576°0	581°2	591°1	601°2	600°8	600°31
599°9	605°8	601°0	601°2	602°2	597°0	599°3	590°4	612°0	602°4	612°2	607°0	601°59
610°5	612°0	611°8	607°0	607°4	607°5	607°4	604°0	614°5	610°0	608°0	620°0	607°15
613°4	613°8	615°0	614°1	611°0	618°0	616°8	616°0	620°2	622°5	622°0	622°0	612°11
627°5	631°4	629°5	629°1	633°0	626°0	625°0	623°8	621°2	615°2	624°8	628°5	621°99
629°0	628°5	630°0	629°2	630°0	631°2	—	—	—	—	—	—	625°30
630°2	626°8	625°2	616°0	623°7	624°6	626°0	625°0	625°2	627°5	627°0	630°3	622°70
610°0	606°2	603°9	611°7	610°0	611°0	611°8	621°0	621°0	622°0	626°5	626°0	611°92
622°4	611°0	618°2	619°0	611°5	612°5	603°4	620°0	628°0	627°0	626°0	629°5	615°24
623°0	619°2	617°0	625°0	625°0	617°0	622°0	631°0	632°0	630°8	631°2	630°2	617°97
631°5	633°0	630°0	632°2	627°2	629°2	632°8	632°7	631°5	630°2	631°1	632°0	625°36
622°0	635°0	636°8	635°0	635°0	633°0	—	—	—	—	—	—	627°71
637°0	637°0	637°0	633°9	634°0	637°0	636°8	633°0	635°0	637°8	638°0	632°0	630°45
629°0	629°2	627°2	623°7	627°2	625°2	628°0	629°0	630°0	630°0	631°2	633°7	626°35
620°5	615°0	614°0	627°0	629°0	625°5	622°1	625°8	625°0	621°2	622°4	629°0	620°62
632°0	631°0	632°0	627°2	630°0	628°0	630°0	631°2	631°2	624°5	625°3	629°0	626°03
622°4	641°8	628°4	636°0	639°6	612°0	627°0	629°0	629°0	630°0	631°2	632°0	628°53
638°0	635°0	637°0	638°0	637°8	639°4	—	—	—	—	—	—	631°01
616°0	654°0	629°0	641°0	471°0	661°0	578°0	590°0	579°0	577°0	592°0	597°0	619°15
601°3	606°3	605°0	605°0	603°1	603°0	602°0	602°4	601°2	603°2	601°0	605°0	600°82
624°5	621°0	623°7	621°0	593°2	582°8	600°8	596°2	603°7	601°0	595°9	598°3	601°36
636°8	638°0	648°7	585°5	567°1	574°4	567°7	531°2	538°4	597°4	575°0	598°5	596°21
621°3	607°0	614°1	629°0	629°0	622°0	620°0	621°5	621°5	619°9	621°9	627°5	613°08
626°0	630°2	631°0	633°0	635°0	632°0	—	—	—	—	—	—	631°81
651°0	656°0	651°0	651°0	655°8	655°0	654°8	655°0	653°4	656°0	655°0	657°2	650°71
653°0	651°0	651°0	652°2	652°2	653°3	652°2	652°8	651°7	650°0	644°3	648°8	648°77
623°69	625°79	624°91	624°17	624°66	620°21	621°97	622°58	626°02	625°25	626°80	628°32	620°34

TEMPERATURE OF THE BIFILAR MAGNET.

58°2	57°5	57°5	57°6	57°5	57°8	58°0	57°5	57°4	57°2	57°0	56°9	56°75
61°4	61°1	60°5	60°2	60°0	59°9	59°5	59°2	59°1	59°1	59°0	58°7	59°61
60°0	60°0	60°0	59°9	59°9	59°4	59°2	59°5	59°5	59°3	59°0	58°1	59°42
60°5	60°3	59°5	58°8	58°5	58°2	57°3	56°2	56°0	55°6	55°5	55°3	54°43
54°8	54°6	54°3	53°9	53°6	53°5	53°5	53°2	53°0	52°8	52°2	51°5	53°94
53°0	52°6	52°0	51°5	51°3	51°0	—	—	—	—	—	—	51°12
—	—	—	—	—	—	48°0	48°0	48°4	48°5	48°5	48°8	—
53°8	54°6	54°5	54°5	54°2	54°2	54°1	54°0	54°0	54°6	54°8	55°2	52°97
58°7	57°5	57°0	56°2	56°0	55°4	55°0	54°0	53°5	53°0	52°8	52°5	56°28
52°3	52°2	52°0	51°8	51°8	51°8	51°8	51°5	51°4	51°3	51°0	50°7	52°00
51°0	50°8	50°6	50°0	50°0	50°0	50°0	50°0	50°0	50°0	50°0	50°0	50°42
50°7	50°4	50°4	50°4	50°7	51°3	51°2	50°5	50°2	50°1	49°2	49°2	50°22
52°0	51°8	51°4	50°6	50°1	49°8	49°1	—	—	—	—	—	49°60
—	—	—	—	—	—	46°5	46°3	46°8	46°7	46°6	47°1	—
49°7	49°1	48°8	48°5	48°2	48°0	47°8	47°5	47°4	47°2	47°4	47°0	48°37
51°1	51°2	51°4	52°0	52°0	52°0	52°3	52°5	52°5	52°5	52°9	53°0	50°59
54°9	55°3	56°0	55°5	55°5	55°5	55°5	55°2	55°0	54°8	55°0	54°7	54°61
54°3	54°0	54°4	54°5	54°6	54°6	54°6	54°0	53°6	53°1	52°5	51°6	53°85
47°0	47°0	46°6	46°5	46°1	45°1	44°7	44°5	44°5	43°9	43°8	43°0	47°08
47°2	46°4	45°0	—	—	—	—	—	—	—	—	—	41°94
—	—	—	—	—	—	44°4	44°4	44°4	44°2	44°4	45°4	—
52°2	52°5	52°5	52°0	52°0	52°3	52°6	53°0	52°0	51°7	51°7	51°8	50°67
54°4	54°4	55°2	55°2	55°5	55°7	55°6	55°4	55°3	55°1	55°5	55°9	53°81
56°5	56°4	56°2	56°0	55°7	55°5	55°4	54°9	54°5	54°2	53°7	53°4	55°53
54°6	54°0	53°0	53°0	52°9	52°8	52°6	52°0	51°7	51°4	50°5	49°5	53°37
46°9	46°9	46°6	46°8	46°7	46°5	46°2	46°0	45°0	45°3	45°5	45°6	46°79
47°0	45°7	44°8	44°9	44°5	44°3	—	—	—	—	—	—	42°57
—	—	—	—	—	—	34°0	33°6	33°4	33°5	34°0	34°3	—
39°0	38°8	37°4	37°5	37°4	37°0	37°0	37°2	37°2	36°8	36°4	35°6	36°58
41°2	41°2	41°4	41°4	40°8	40°7	41°0	40°5	40°5	40°8	40°5	40°2	39°71
52°73	52°50	52°60	52°30	52°10	51°87	51°73	51°58	50°79	50°49	50°36	50°23	50°12
—	—	—	—	—	—	—	—	—	—	—	—	49°93
—	—	—	—	—	—	—	—	—	—	—	—	51°31

disturbance.

HORIZONTAL FORCE.													12 <sup>h</sup> .
One Scale Division = 0.00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.													
Mean Galt- gen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	653.0	651.0	650.0	649.0	647.5	646.0	646.0	663.0	663.0	653.0	652.0	644.8	645.0
2	636.5	636.0	646.0	647.5	646.5	642.0	639.0	611.2	629.5	619.8	620.4	630.0	621.0
3	622.1	628.2	633.0	628.0	609.2	616.5	610.2	615.6	617.1	626.0	632.2	633.0	631.4
4	647.0	645.0	640.0	639.6	645.7	633.8	630.6	633.0	627.0	630.0	638.9	640.2	641.5
5	—	—	—	—	—	—	—	—	—	—	—	—	—
6	650.8	650.0	645.6	644.0	637.0	631.4	636.0	638.0	637.5	641.0	642.8	647.0	648.0
7	654.0	654.2	651.0	647.0	646.0	640.0	640.0	640.8	645.0	647.5	647.4	655.4	653.0
8	665.0	644.0	638.0	637.0	620.0	624.0	622.0	630.0	629.2	633.0	634.8	631.6	637.1
9	631.0	636.0	639.0	621.0	617.4	603.0	620.0	621.4	626.0	628.0	630.6	635.5	637.0
10	635.4	633.2	638.2	628.0	616.2	620.0	612.4	612.0	612.0	622.5	618.0	620.5	615.0
11	638.5	630.9	627.0	630.0	621.0	615.0	611.8	608.6	618.0	622.0	609.0	620.0	630.0
12	—	—	—	—	—	—	—	—	—	—	—	—	—
13	646.0	645.8	645.0	631.0	625.0	613.0	620.0	620.0	631.0	635.0	642.0	640.8	642.0
14	642.0	648.0	649.0	639.5	633.0	621.1	626.0	622.8	624.2	634.0	642.2	644.0	645.0
15	649.5	650.3	648.0	645.2	636.0	630.5	626.8	628.5	633.1	633.5	646.0	646.0	646.0
16	651.2	651.4	655.2	649.0	644.0	639.0	637.0	647.0	652.2	660.4	669.0	664.0	663.5
17	639.0	643.4	655.0	677.0	582.0	652.5	593.0	590.4	612.5	611.0	612.0	626.0	625.0
18 <sup>a</sup>	631.0	627.0	609.0	603.0	631.0	620.0	615.0	617.0	634.0	635.0	636.0	634.2	638.0
19	—	—	—	—	—	—	—	—	—	—	—	—	—
20 <sup>a</sup>	120.8	151.2	292.2	251.7	461.5	495.5	502.0	505.8	619.0	635.1	692.5	659.0	660.0
21	644.0	620.0	611.0	604.0	612.2	616.0	612.0	617.8	617.5	616.0	625.5	629.0	629.2
22	641.4	643.2	640.0	622.2	636.0	633.7	620.3	622.0	626.0	620.0	635.8	641.0	655.0
23	643.5	640.0	640.0	637.0	630.0	631.3	624.8	626.0	637.3	637.0	640.8	637.0	648.0
24	646.0	644.8	646.0	645.0	642.5	636.7	631.0	631.0	639.0	645.0	641.2	647.0	644.2
25 <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	665.0	663.0	658.0	655.0	649.2	640.0	642.0	646.0	652.0	649.0	660.0	664.0	662.8
28	660.0	660.2	657.8	654.1	648.0	639.0	635.0	638.0	643.4	649.2	652.2	656.0	656.1
29	652.0	650.5	651.0	643.5	639.2	634.0	645.0	629.5	640.2	624.5	626.4	626.0	631.0
30	635.0	635.0	635.0	631.5	627.5	620.5	619.5	624.0	616.4	617.5	628.0	630.2	631.8
31	630.3	630.0	630.8	629.0	624.0	620.0	622.8	624.0	625.0	625.8	628.0	631.2	632.7
Hourly Means	643.88	644.05	642.90	638.92	630.63	629.25	626.05	627.61	631.42	632.40	637.30	639.26	640.85
TEMPERATURE OF THE BILAR MAGNET.													
	1	2	3	4	5	6	7	8	9	10	11	12	13
DECEMBER.	40.4	40.3	40.5	41.0	41.9	42.4	43.0	43.5	44.0	44.6	45.2	45.6	46.0
2	46.8	46.7	46.0	46.0	46.0	46.5	47.4	48.0	48.1	49.0	48.8	48.5	48.4
3	46.5	46.2	46.0	46.0	46.0	46.4	46.6	46.4	46.1	46.0	45.9	45.2	45.0
4	44.6	44.3	43.6	43.6	43.6	44.0	44.0	44.0	44.2	44.4	44.3	43.8	43.7
5	—	—	—	—	—	—	—	—	—	—	—	—	—
6	44.6	44.6	44.2	44.2	42.6	43.4	44.5	44.8	45.2	45.5	45.2	45.2	46.0
7	43.2	43.5	43.5	43.7	44.3	44.9	45.5	46.1	47.5	48.9	49.2	49.4	49.2
8	47.0	46.5	46.1	46.4	46.9	48.0	48.6	49.2	49.4	49.8	49.8	49.7	50.5
9	51.5	51.4	50.5	50.4	50.4	50.6	50.6	50.5	50.0	50.5	50.7	51.0	51.1
10	54.0	53.8	53.6	53.9	53.8	54.4	54.7	55.1	55.0	55.2	55.2	55.0	55.0
11	51.6	51.1	51.0	51.2	51.3	51.4	51.5	51.7	51.5	52.2	52.3	51.4	51.4
12	—	—	—	—	—	—	—	—	—	—	—	—	—
13	49.0	49.0	49.7	48.5	48.5	48.8	48.9	49.4	49.5	49.5	49.5	49.5	49.5
14	47.3	47.2	46.2	46.4	46.5	47.5	48.1	48.4	48.3	48.2	47.4	47.0	47.0
15	47.4	47.1	47.2	46.7	47.3	48.1	48.4	48.1	48.1	48.8	48.7	48.4	48.1
16	44.4	44.4	44.3	40.2	39.4	39.1	39.5	40.2	40.5	41.2	41.3	41.2	41.5
17	38.5	38.5	37.5	37.4	38.0	38.0	39.0	40.3	40.4	42.0	42.8	43.0	42.5
18 <sup>a</sup>	40.0	40.0	38.9	38.8	39.4	39.8	40.5	41.2	41.6	42.5	42.9	42.6	42.6
19	—	—	—	—	—	—	—	—	—	—	—	—	—
20 <sup>a</sup>	40.6	39.9	39.4	39.0	38.1	38.3	38.6	38.8	39.0	38.8	38.8	37.5	36.4
21	34.6	35.4	35.2	35.0	35.2	35.7	35.8	36.4	36.7	37.5	37.5	36.9	36.6
22	38.2	38.4	38.4	38.4	38.6	39.1	40.0	41.0	41.5	42.4	42.5	43.0	43.0
23	41.6	41.4	40.5	40.0	39.6	39.9	39.5	39.0	39.4	39.8	40.5	40.4	41.0
24	38.6	38.2	38.2	38.7	39.0	39.5	39.5	40.5	40.6	41.3	41.6	42.2	42.8
25 <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	32.5	33.1	33.0	33.0	33.2	33.8	34.0	34.0	33.8	34.0	33.0	33.0	32.7
28	37.9	38.2	38.2	38.7	39.2	39.6	40.0	40.7	41.4	41.9	42.0	42.0	42.7
29	45.0	45.0	45.1	45.4	46.7	47.2	48.4	48.9	48.9	49.3	49.3	48.9	49.1
30	49.4	49.9	50.1	50.3	50.5	51.3	51.4	51.4	51.4	51.9	52.1	52.2	52.8
31	52.5	52.6	53.0	53.0	53.0	53.0	52.9	52.9	52.8	53.4	53.6	53.2	53.5
Hourly Means	44.21	44.20	43.98	43.96	44.23	44.69	45.07	45.46	45.61	46.14	46.18	46.07	46.21

\* Not included in the Means on account of disturbance.

<sup>b</sup> Christmas Day.



HORIZONTAL FORCE.												
One Scale Division = 0.00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.63.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	622.0	633.5	633.5	634.0	629.2	625.4	622.4	621.7	617.1	619.0	623.6	627.0
2	—	—	—	—	—	—	—	—	—	—	—	—
3	613.8	615.4	614.0	611.9	617.1	627.4	627.0	627.0	623.0	626.0	634.6	627.8
4	610.0	616.0	617.2	631.5	628.0	623.4	622.4	619.4	615.5	615.7	628.2	633.4
5	619.4	650.4	650.4	614.9	631.4	624.4	629.6	633.4	631.2	637.4	644.0	645.8
6	652.3	653.8	656.0	651.0	611.0	644.0	633.5	637.5	640.2	613.8	618.2	650.2
7	662.0	660.0	659.0	671.2	656.8	613.2	634.2	635.6	637.0	644.8	653.0	651.0
8	658.2	656.4	657.8	652.0	642.1	633.8	635.9	630.8	628.8	610.0	619.0	651.0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	672.1	670.5	676.0	680.0	650.0	645.0	617.0	650.8	660.5	670.5	677.5	676.0
11	674.0	673.8	673.0	667.5	656.5	612.5	650.0	658.5	663.0	670.0	676.0	682.2
12	625.0	624.5	610.5	626.0	631.5	620.0	620.0	632.7	616.0	613.8	638.0	649.0
13	610.0	630.0	619.0	573.2	622.8	618.2	615.0	617.0	638.0	631.2	646.0	622.0
14	626.6	621.8	620.0	608.0	605.0	600.0	605.9	609.0	613.0	625.0	606.0	630.5
15	629.0	630.0	626.0	625.8	613.9	606.0	607.0	613.5	612.2	626.5	628.0	628.0
16	—	—	—	—	—	—	—	—	—	—	—	—
17	621.0	623.8	625.0	624.0	615.0	610.0	613.0	616.0	617.0	623.5	631.0	632.9
18	610.0	619.0	639.5	637.0	631.0	622.0	621.8	616.8	628.8	636.8	647.0	645.5
19	652.5	652.5	652.0	662.8	611.2	638.0	628.4	636.0	634.2	631.0	645.0	648.0
20	643.3	640.0	646.0	642.0	639.0	627.0	628.5	633.2	638.2	642.0	630.0	641.0
21	612.1	642.9	643.6	640.5	633.0	629.5	625.0	628.5	627.5	629.0	627.5	623.5
22	614.0	642.5	643.8	640.0	640.0	631.8	626.0	628.0	632.0	640.0	652.0	648.8
23	—	—	—	—	—	—	—	—	—	—	—	—
24	631.0	649.0	630.0	625.0	629.0	625.0	628.0	621.8	626.0	639.2	644.0	639.0
25	610.0	639.0	631.0	621.0	613.2	606.2	608.2	611.0	621.0	627.9	642.5	635.0
26	630.0	634.2	632.2	623.9	612.0	611.2	611.0	620.0	621.0	625.0	634.0	637.0
27	627.0	627.0	630.0	625.0	611.0	600.0	597.0	612.0	621.0	631.0	638.0	638.0
28	635.0	638.0	637.4	624.0	616.0	614.0	620.0	627.5	637.2	638.0	649.0	638.8
29	610.0	606.2	616.0	610.0	614.0	605.0	602.0	610.5	616.0	621.2	625.5	625.1
30	—	—	—	—	—	—	—	—	—	—	—	—
31	611.5	640.0	638.9	636.0	627.8	618.8	615.8	620.0	623.9	628.9	632.6	638.0
Hourly Means	610.85	640.78	639.65	635.43	629.52	622.31	622.10	625.82	629.01	633.74	640.39	641.08

TEMPERATURE OF THE DIAPHRAGM.												
1	51.5	51.5	51.5	51.6	51.5	51.8	51.9	51.9	51.6	51.6	51.4	51.2
2	—	—	—	—	—	—	—	—	—	—	—	—
3	45.6	45.5	45.4	45.7	46.1	46.1	46.2	46.4	46.2	46.9	47.4	47.5
4	47.5	47.0	46.2	46.6	46.1	47.0	47.0	46.4	46.3	46.4	46.8	46.0
5	42.0	42.0	41.7	41.3	41.3	41.7	42.0	42.5	44.1	45.6	46.5	45.9
6	38.0	37.6	37.5	37.2	37.9	39.0	39.1	39.8	39.8	39.7	39.8	39.1
7	35.9	36.0	36.4	36.4	36.6	37.1	37.6	38.0	37.6	37.3	38.1	37.8
8	39.4	39.5	39.5	39.8	40.3	41.0	41.9	42.9	43.2	43.8	44.0	44.2
9	—	—	—	—	—	—	—	—	—	—	—	—
10	26.9	26.5	25.0	25.2	25.5	26.0	27.0	28.0	28.0	28.8	29.5	29.6
11	25.2	26.5	26.7	26.7	26.7	27.5	28.3	29.7	30.5	31.8	32.5	33.0
12	31.3	31.0	31.3	35.0	36.0	37.0	37.5	39.2	40.1	40.6	41.6	41.6
13	42.4	42.6	42.6	43.0	43.4	43.7	43.8	44.3	44.2	44.6	45.0	45.1
14	47.6	47.7	47.5	47.6	47.9	48.2	48.5	48.6	48.4	49.0	49.4	49.5
15	50.0	50.4	50.1	50.2	49.8	50.2	50.7	51.3	51.6	52.2	52.5	52.4
16	—	—	—	—	—	—	—	—	—	—	—	—
17	43.7	43.5	43.1	43.3	43.3	43.5	43.5	43.8	44.0	44.8	45.4	45.8
18	42.0	42.5	41.5	41.5	41.5	41.4	40.5	40.6	40.9	41.7	41.8	40.5
19	35.1	35.4	35.4	36.2	37.6	37.8	38.1	38.7	38.6	38.9	39.5	39.4
20	43.0	43.1	42.8	42.7	43.5	44.9	45.1	45.6	46.4	47.5	48.4	48.2
21	46.5	46.4	46.4	46.5	47.4	48.4	49.0	49.5	49.5	49.8	49.5	48.6
22	42.2	42.2	41.4	41.2	41.0	41.6	42.0	41.9	41.5	42.5	43.0	44.2
23	—	—	—	—	—	—	—	—	—	—	—	—
24	37.2	37.5	38.0	38.5	39.0	40.5	41.4	41.8	42.8	44.0	44.8	44.5
25	44.0	41.5	41.2	44.6	45.4	45.8	46.3	46.6	46.9	47.8	48.4	48.5
26	49.8	49.4	48.7	48.4	48.0	48.8	49.0	49.2	48.9	49.4	49.4	49.3
27	50.5	50.0	50.0	49.9	50.0	50.6	51.4	51.9	51.9	52.1	52.1	51.6
28	48.8	48.2	48.2	48.3	48.8	49.7	49.5	50.0	49.5	49.5	49.5	49.2
29	46.0	46.0	45.8	46.0	46.4	47.0	47.4	47.4	47.4	47.3	47.8	47.8
30	—	—	—	—	—	—	—	—	—	—	—	—
31	43.7	44.0	44.0	44.6	44.6	45.1	45.2	45.6	45.8	47.1	48.1	48.6
Hourly Means	42.42	42.39	42.18	42.35	42.65	43.25	43.56	44.02	44.19	44.76	45.24	45.08

12h.
627.2
634.0
631.4
645.2
650.6
653.4
648.1
674.0
670.8
637.2
621.0
619.0
628.0
—
632.9
649.0
649.0
649.0
610.0
626.0
641.8
—
640.9
637.0
635.0
637.0
629.0
638.8
—
621.3
638.8
638.95

re, 1° 63.

10h.	11h.
623'6	627'0
624'6	627'8
628'2	633'4
644'0	645'8
648'2	650'2
653'0	651'0
649'0	651'0
677'5	676'0
676'0	682'2
648'0	649'0
616'0	622'0
606'0	630'5
628'0	628'5
631'0	632'9
617'0	645'5
645'0	648'0
630'0	641'0
627'5	623'5
652'0	648'8
644'0	639'0
642'5	635'0
634'0	637'0
638'0	638'0
649'0	638'8
625'5	625'1
632'6	638'0
640'39	641'08

HORIZONTAL FORCE.

One Scale Division = .00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
627'2	630'0	630'2	634'9	634'4	635'0	635'9	611'9	640'0	643'9	642'2	645'0	631'58
631'0	622'0	613'2	621'0	614'0	619'0	625'0	615'4	616'0	616'0	627'4	630'1	627'42
634'4	636'4	639'4	640'6	641'2	641'2	639'6	642'4	644'4	643'5	647'5	644'8	634'42
645'2	641'8	643'8	641'1	641'7	641'0	648'4	645'0	646'0	646'4	649'0	654'0	642'70
650'6	649'1	647'2	647'0	647'0	650'0	649'4	650'8	653'0	653'5	656'0	660'0	648'13
653'4	650'0	651'4	651'5	652'5	652'0	656'0	653'0	657'5	657'5	658'0	658'1	652'71
648'4	650'1	651'0	648'0	649'0	649'0	665'0	665'8	668'2	673'2	677'8	677'6	652'44
674'0	668'0	661'0	673'8	676'0	674'2	675'8	671'2	670'0	672'0	676'0	673'8	668'53
670'8	669'8	660'2	689'5	703'5	671'0	668'0	669'1	627'6	610'0	618'4	643'0	667'00
637'2	640'0	639'0	638'0	637'4	633'2	642'8	646'0	635'5	633'0	638'0	642'1	631'22
621'0	631'0	630'8	637'0	628'0	630'0	628'8	628'0	625'0	628'0	627'0	629'5	625'69
619'0	615'0	623'0	624'0	628'5	624'0	626'0	627'0	627'8	629'4	624'2	628'8	619'44
628'0	628'0	630'0	631'0	639'8	631'8	622'5	615'5	617'2	621'2	621'2	618'0	623'57
632'0	635'2	631'0	633'2	630'0	637'0	634'2	631'8	635'2	635'0	637'2	639'5	627'85
619'0	638'1	641'0	641'0	641'8	643'0	642'2	641'0	643'0	643'6	653'0	653'0	639'20
619'0	649'0	645'0	649'2	647'5	650'2	648'0	643'0	639'8	646'8	649'8	646'0	645'20
610'0	641'3	641'0	637'0	639'0	642'5	653'5	638'2	639'0	641'2	641'0	640'5	639'35
626'0	628'0	635'0	639'2	638'2	638'0	639'5	641'0	643'5	645'6	644'0	645'33	645'33
641'8	648'8	647'0	644'9	643'0	635'0	613'8	644'2	645'9	637'8	639'4	641'5	640'80
640'9	638'0	640'0	641'0	644'2	641'0	640'0	640'8	641'5	641'6	640'5	641'0	636'81
637'0	635'0	636'0	636'8	636'2	635'2	637'8	638'5	640'0	641'0	638'5	632'1	631'22
635'0	630'0	618'5	630'8	633'0	625'0	624'0	622'8	624'0	629'2	628'8	628'8	625'89
629'0	634'5	636'0	636'0	637'8	627'4	617'2	616'4	615'4	626'5	620'2	631'0	624'40
627'0	618'5	660'0	613'0	615'5	572'0	560'0	591'0	532'0	533'5	537'0	560'5	609'50
624'3	624'5	625'2	626'5	627'2	627'0	620'5	627'0	625'6	615'0	611'0	642'0	621'69
638'8	638'0	638'2	640'4	645'3	642'5	642'2	641'0	645'0	641'0	642'5	643'2	635'97
638'95	640'40	640'50	640'36	641'33	637'43	637'48	638'01	634'45	637'05	638'98	640'32	636'98

TEMPERATURE OF THE BIPOLAR MAGNET.

51'4	51'2	51'8	51'4	53'4	53'3	53'3	45'5	45'5	45'5	46'0	46'1	46'2	52'13
47'4	47'5	47'5	47'5	47'5	48'0	48'0	48'0	48'0	48'4	48'6	48'8	48'5	47'13
46'8	46'0	44'6	44'5	43'8	43'5	43'0	42'3	42'0	41'8	41'8	42'0	42'0	41'83
46'5	45'9	43'9	42'8	41'5	40'7	40'2	40'2	40'0	40'0	39'7	39'5	39'8	42'05
39'8	39'1	38'1	37'1	36'9	36'7	36'5	36'4	36'0	35'0	34'4	35'4	35'5	37'55
38'1	37'8	37'8	37'7	37'0	35'8	36'0	37'0	37'4	38'4	39'0	39'2	39'2	37'39
44'0	44'2	44'5	44'7	41'5	41'0	43'6	43'0	—	—	—	—	—	38'84
29'5	29'6	29'7	29'5	29'0	28'8	28'4	28'6	28'7	27'4	25'7	25'6	21'8	27'37
32'5	33'0	33'6	34'5	35'1	35'1	35'1	35'0	34'8	35'0	35'0	35'2	34'6	31'80
41'6	41'6	41'5	40'7	40'0	39'6	39'1	38'8	38'5	38'9	39'9	40'5	41'0	41'6
45'0	45'4	46'0	45'6	45'4	44'5	46'0	46'0	46'1	46'5	46'7	47'5	47'6	45'06
49'4	49'5	50'0	49'5	49'5	49'5	49'8	50'0	50'0	50'2	50'6	50'7	50'2	49'15
52'5	52'2	52'4	51'9	51'6	51'4	51'0	50'2	—	—	—	—	—	49'29
45'4	45'8	45'6	44'8	44'6	44'2	44'0	43'9	44'5	43'2	42'2	42'0	44'0	43'84
41'8	40'5	40'1	38'8	38'0	37'0	36'4	36'4	36'1	35'7	35'5	35'7	35'5	39'08
39'5	39'4	39'2	39'4	38'9	38'5	38'6	39'0	39'5	40'0	41'4	41'6	42'5	38'82
48'4	48'2	48'2	48'2	47'9	48'0	47'6	47'6	47'7	47'6	47'8	47'6	47'0	46'44
49'5	48'6	48'5	47'1	46'5	46'2	45'6	45'0	44'1	43'4	43'2	43'2	43'0	42'7
44'0	44'2	44'6	43'8	43'6	43'0	42'5	41'7	—	—	—	—	—	46'50
44'8	44'5	44'6	44'2	43'6	43'4	43'4	43'4	43'0	42'5	42'5	43'0	43'3	42'11
48'4	48'5	48'7	48'1	48'2	48'3	48'3	48'4	48'3	48'4	48'9	49'0	49'4	47'37
49'4	49'3	49'8	49'8	50'5	50'9	51'0	51'0	51'0	51'0	51'0	51'0	50'9	49'86
52'1	51'6	52'1	52'0	51'7	51'4	51'2	50'4	50'2	50'0	49'6	49'5	49'1	50'77
49'5	49'2	49'4	49'3	49'4	49'4	49'2	47'8	47'2	46'8	46'5	46'3	46'1	48'44
47'8	47'8	47'5	47'2	47'0	46'6	46'2	46'0	—	—	—	—	—	45'54
48'1	48'6	48'8	47'0	46'2	45'2	44'5	44'0	43'8	43'7	43'5	43'3	43'1	45'12
45'24	45'08	45'16	44'70	44'40	44'08	43'84	43'50	42'00	41'87	41'83	41'96	41'99	41'96



HORIZONTAL FORCE.												
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.												
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
FEBRUARY.												
1	646'9	617'3	646'5	640'0	636'0	628'5	624'2	621'0	631'0	633'0	638'0	641'0
2	657'8	616'1	650'4	650'0	636'4	628'8	622'0	628'0	639'0	643'5	648'5	648'5
3	650'0	650'0	650'8	641'5	631'5	622'0	623'0	626'0	628'0	634'0	640'0	641'0
4	648'2	646'0	645'5	639'5	631'5	622'4	621'0	619'8	626'8	634'2	638'8	643'2
5	648'1	647'4	646'0	643'4	633'8	630'2	631'9	635'0	637'8	638'6	643'0	645'0
6	—	—	—	—	—	—	—	—	—	—	—	—
7	656'0	652'2	649'2	643'2	635'0	632'0	637'0	643'0	639'2	638'8	650'0	659'0
8	644'2	641'0	635'5	641'5	629'0	613'0	598'0	633'5	643'0	642'8	647'5	652'0
9	645'0	641'2	640'4	634'0	621'5	605'0	623'0	623'0	652'5	625'0	643'0	632'4
10	647'0	648'1	648'0	648'0	636'0	634'0	627'0	613'0	629'2	638'2	641'8	645'0
11	660'0	653'5	661'0	663'8	665'0	645'4	641'8	642'1	650'0	651'0	655'1	656'2
12	661'0	661'5	658'2	657'4	659'0	648'0	640'0	636'0	638'8	643'0	646'2	655'0
13	—	—	—	—	—	—	—	—	—	—	—	—
14	660'2	661'0	658'4	652'0	646'0	648'0	649'0	655'0	658'0	653'0	652'0	641'0
15	650'0	648'2	636'0	646'0	642'5	638'0	628'0	628'0	640'0	642'0	638'0	641'0
16	647'3	646'0	646'2	641'0	631'0	624'0	626'0	630'6	635'4	631'0	636'9	640'0
17	646'0	647'0	646'0	639'0	636'0	628'2	627'8	629'0	638'0	642'0	643'5	645'0
18	648'2	646'8	641'2	638'0	626'0	620'0	622'0	628'0	638'0	638'5	642'0	645'0
19	643'0	641'2	636'0	625'0	628'5	635'0	635'0	639'0	641'0	638'6	639'0	637'0
20	—	—	—	—	—	—	—	—	—	—	—	—
21	584'0	320'0	506'0	638'8	616'5	588'5	618'5	617'0	569'3	608'3	729'5	736'9
22	597'5	595'0	586'0	591'5	592'5	588'2	601'5	595'0	570'0	642'0	609'8	613'0
23	616'0	618'0	613'0	615'0	610'5	601'2	572'5	611'0	624'2	613'0	624'0	614'0
24	565'8	553'6	545'2	578'0	601'7	600'5	610'6	612'0	612'0	623'0	626'0	619'0
25	636'8	588'0	621'6	639'0	612'4	613'0	617'5	614'0	624'0	623'5	634'0	631'0
26	645'5	647'0	643'0	639'5	630'0	621'0	611'3	611'0	618'0	623'0	627'5	632'8
27	—	—	—	—	—	—	—	—	—	—	—	—
28	653'0	642'0	648'0	640'0	630'5	621'8	616'4	628'2	598'0	621'8	645'0	635'2
29	645'0	645'0	643'0	638'8	636'0	628'2	620'6	622'8	625'2	628'2	636'0	640'0
Hourly Means	644'39	639'92	639'51	638'85	632'43	625'70	622'85	627'71	633'55	635'03	640'25	640'84
TEMPERATURE OF THE BIPOLAR MAGNET.												
FEBRUARY.												
1	43'2	42'7	42'1	41'6	41'7	42'0	42'4	42'4	43'0	43'6	44'2	44'0
2	41'8	41'8	41'4	41'8	42'7	43'5	44'0	44'7	45'0	47'0	48'1	48'5
3	46'3	46'0	45'5	46'3	47'2	47'8	48'3	49'0	49'2	50'1	51'1	51'3
4	44'8	44'5	44'7	45'0	46'4	47'3	47'6	48'0	48'0	48'4	48'4	48'6
5	46'0	46'2	46'0	45'4	46'2	46'8	46'8	46'0	45'5	45'5	45'2	43'9
6	—	—	—	—	—	—	—	—	—	—	—	—
7	39'0	38'4	37'8	37'0	37'0	37'4	37'8	38'4	39'2	40'5	41'0	42'7
8	39'4	39'0	38'4	37'6	38'0	39'0	40'1	41'3	41'5	42'6	43'0	43'2
9	41'5	41'4	41'6	42'5	42'5	42'3	41'8	42'5	43'0	43'0	41'0	43'5
10	40'5	40'5	40'0	39'4	39'4	39'4	39'4	39'4	39'6	39'8	40'3	39'8
11	32'0	31'5	32'0	33'0	33'9	34'4	34'4	34'9	35'7	35'9	38'4	38'8
12	36'1	36'0	35'2	34'9	35'9	37'0	37'2	38'5	39'7	41'0	41'8	42'6
13	—	—	—	—	—	—	—	—	—	—	—	—
14	38'7	38'5	38'5	40'2	41'4	42'2	42'8	43'7	44'6	45'3	45'5	45'4
15	43'0	42'4	42'0	42'3	42'7	42'8	43'0	43'7	44'7	46'0	47'5	48'0
16	42'8	42'5	42'9	44'5	46'0	47'0	47'5	48'4	48'6	49'2	49'9	49'6
17	41'0	43'4	44'0	45'0	46'0	47'0	47'6	47'6	48'4	49'5	50'3	50'9
18	45'6	45'6	45'6	46'5	47'0	48'0	48'5	49'8	50'4	50'7	51'0	51'3
19	46'0	45'5	45'1	45'2	46'0	46'8	48'0	48'6	48'8	48'7	50'3	50'0
20	—	—	—	—	—	—	—	—	—	—	—	—
21	45'2	45'2	45'2	46'3	46'9	47'9	48'2	47'5	49'5	51'0	51'5	52'4
22	49'8	49'8	49'2	49'0	49'0	49'5	49'9	50'2	50'4	50'5	50'8	50'5
23	49'4	49'0	49'3	49'2	49'6	49'6	49'2	48'7	48'5	49'0	49'0	49'0
24	45'2	44'3	44'0	44'0	43'7	44'2	44'5	45'3	46'0	46'4	46'4	46'6
25	42'0	40'4	40'7	41'0	42'0	42'9	43'3	43'6	43'4	43'8	45'0	45'2
26	43'3	42'7	43'5	45'2	46'1	46'1	45'9	46'0	46'3	46'7	47'6	47'4
27	—	—	—	—	—	—	—	—	—	—	—	—
28	42'8	42'0	41'8	41'5	42'3	43'1	44'5	45'1	45'8	46'3	46'8	46'5
29	44'5	44'4	44'0	44'4	45'0	45'4	45'4	45'3	44'9	44'9	44'5	44'2
Hourly Means	42'52	42'12	42'02	42'33	42'99	43'57	43'91	44'39	44'77	45'39	46'06	46'13

\* Three minutes late.

10%, 11%.

638°0	641°0
648°5	648°5
640°0	641°0
638°8	643°2
643°0	645°0
650°0	659°0
647°5	652°0
643°0	652°4
641°8	645°0
655°1	650°2
646°2	655°0
652°0	641°0
638°0	644°0
636°9	640°0
643°5	645°0
642°0	645°0
639°0	637°0
729°5	736°9
609°8	613°0
624°0	614°0
626°0	619°0
634°0	631°0
627°5	632°8
635°0	635°2
636°0	640°0
640°25	640°84

HORIZONTAL FORCE.

One Scale Division = 0.00087 parts of the I.L.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
616°2	647°0	647°4	646°5	648°0	646°0	647°0	645°5	646°8	648°4	646°8	651°0	644°79
644°0	642°0	641°3	642°8	644°2	645°0	647°2	646°0	647°0	645°6	648°0	647°4	643°31
641°4	641°2	642°4	629°3	624°0	630°0	635°1	632°0	640°2	644°8	645°0	649°0	637°18
642°9	642°8	642°8	643°0	642°0	641°8	643°4	646°7	647°7	650°0	647°5	649°0	639°85
648°0	647°0	647°2	650°0	650°9	651°2	—	—	—	—	—	—	640°20
—	—	—	—	—	—	623°0	610°0	638°0	628°0	638°0	653°2	—
629°0	645°5	645°0	634°0	638°0	638°5	636°0	641°2	642°8	643°2	644°8	641°4	642°25
642°0	640°8	631°5	642°0	641°2	627°8	626°0	632°0	640°2	629°0	628°1	630°2	634°24
639°8	637°8	633°8	637°7	640°0	642°0	640°0	641°4	648°0	645°8	647°0	648°0	636°72
647°0	643°8	644°2	652°0	653°0	653°0	658°0	657°0	656°7	657°7	658°5	658°5	645°61
660°0	661°0	661°8	663°0	663°0	660°0	663°0	662°0	662°0	662°0	662°0	662°2	657°94
652°2	653°0	654°0	653°0	658°0	657°0	—	—	—	—	—	—	—
—	—	—	—	—	—	655°0	659°8	660°0	661°4	660°0	660°0	653°65
643°0	652°0	648°2	646°8	645°2	634°8	630°0	627°7	619°0	641°0	642°0	640°8	645°58
640°2	644°0	642°2	640°8	640°6	637°0	638°9	638°7	638°0	638°2	641°0	645°5	640°12
641°0	644°2	644°1	643°3	643°0	638°5	639°0	645°0	647°3	646°2	646°3	647°1	640°14
647°0	642°2	643°8	643°0	643°5	644°0	647°1	643°1	644°0	645°0	647°0	648°4	641°69
645°6	646°8	647°5	649°0	645°0	646°5	640°0	638°8	645°2	642°8	638°0	648°0	639°87
645°0	—	—	—	—	—	—	—	—	—	—	—	626°79
—	—	—	—	—	—	610°0	617°1	563°0	600°0	594°1	593°9	—
377°2	594°0	667°5	573°6	631°4	610°2	638°2	617°0	590°0	586°2	589°0	570°3	599°07
605°0	605°0	602°0	609°1	607°8	611°0	620°2	525°1	594°0	585°0	602°5	606°0	599°36
622°0	618°0	611°0	617°5	623°5	628°5	640°0	599°0	543°0	585°0	596°0	530°5	607°06
621°0	622°0	616°0	627°5	623°0	614°0	612°0	540°5	501°2	536°4	480°7	640°7	590°93
619°0	632°0	636°2	626°2	631°4	631°2	636°3	633°1	645°0	636°0	637°5	640°0	627°15
636°2	638°8	633°4	645°1	626°0	—	—	—	—	—	—	—	—
—	—	—	—	—	—	642°0	640°9	647°0	645°4	645°0	650°8	635°12
633°0	635°2	638°9	640°0	637°0	639°0	641°0	640°5	640°0	638°6	641°2	648°0	635°10
641°4	646°8	644°8	644°0	645°5	647°0	643°0	645°0	645°0	646°0	649°0	651°2	639°90
639°56	642°13	641°90	641°41	639°99	640°40	638°39	634°04	629°87	645°50	634°07	640°64	636°62

TEMPERATURE OF THE DIAPHRAGM.

41°0	44°0	43°0	43°9	43°9	43°7	43°6	43°4	43°3	43°0	42°0	43°12
48°1	38°5	47°5	47°5	47°0	46°4	46°3	46°3	46°3	46°3	46°4	45°52
51°1	51°3	50°5	49°7	47°5	47°4	45°7	45°9	45°5	45°4	45°2	44°9
48°4	48°6	49°0	48°4	48°2	47°4	47°0	46°8	46°3	46°1	46°0	46°98
45°2	43°9	43°7	42°9	42°6	42°5	42°0	41°8	—	—	—	—
—	—	—	—	—	—	—	37°0	37°2	37°5	37°7	38°0
41°0	42°7	42°5	42°5	42°0	41°6	41°0	41°0	40°6	40°4	40°2	40°2
43°0	43°2	43°5	43°3	43°4	43°6	43°8	43°5	43°2	43°1	43°0	42°5
44°0	43°5	43°7	43°6	43°6	43°4	43°4	43°0	42°7	42°6	42°4	42°7
40°3	39°8	39°5	39°7	37°0	37°0	36°0	35°1	34°9	34°5	32°5	32°8
38°4	38°8	38°5	38°5	37°4	37°0	36°9	36°5	36°0	36°0	35°7	35°7
41°8	42°6	42°5	42°6	42°5	42°0	41°6	41°5	—	—	—	—
—	—	—	—	—	—	—	36°0	36°4	36°6	36°9	37°8
45°5	45°4	46°0	46°0	46°1	46°0	45°8	45°6	45°5	45°1	44°5	44°0
47°5	48°0	48°0	47°6	46°6	46°0	45°4	44°7	44°2	44°0	43°8	43°0
49°9	49°6	49°0	48°6	47°8	46°8	46°6	45°5	45°0	44°7	44°2	43°8
50°3	50°9	50°6	50°8	50°1	49°5	49°5	48°5	48°2	47°6	47°4	47°1
51°0	51°3	51°0	50°3	49°8	49°5	49°0	48°5	48°2	47°6	47°4	47°1
50°3	50°0	50°1	49°9	49°5	48°8	48°6	—	—	—	—	—
—	—	—	—	—	—	—	44°5	44°5	44°5	44°7	44°6
51°5	52°4	52°5	52°4	52°0	51°8	51°7	51°5	51°4	51°1	50°9	50°0
50°8	50°5	50°0	49°6	49°2	48°8	49°0	48°8	48°3	48°6	48°6	48°8
49°0	49°0	49°0	48°0	47°6	47°7	47°0	46°8	46°6	46°3	46°0	45°6
46°4	46°6	46°2	45°3	45°0	44°5	44°0	44°3	44°5	44°2	44°0	44°1
45°0	45°2	45°0	45°5	46°6	46°6	46°3	45°5	45°7	45°6	44°2	43°8
47°6	47°4	47°0	46°7	46°4	45°9	45°4	—	—	—	—	—
—	—	—	—	—	—	—	43°0	42°8	42°9	42°7	43°2
46°8	46°5	46°5	46°5	46°4	46°4	46°5	46°5	46°1	45°1	44°5	44°5
44°5	44°2	44°0	43°4	43°1	42°5	42°5	42°6	42°5	42°5	42°5	42°5
46°06	46°13	45°70	45°45	45°11	44°75	44°40	43°47	43°28	43°03	42°80	42°74
—	—	—	—	—	—	—	—	—	—	—	42°60
—	—	—	—	—	—	—	—	—	—	—	43°98

HORIZONTAL FORCE.													
One Scale Division = .00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
MARCH.	1	651'0	649'2	644'0	634'0	637'5	633'0	631'1	631'0	637'8	638'0	640'0	641'0
	2	650'1	647'0	643'1	639'0	635'0	627'2	626'0	632'2	637'5	641'0	646'0	650'0
	3	655'0	655'4	647'0	640'0	633'0	625'5	625'8	631'6	640'0	647'0	650'5	651'2
	4	654'2	656'0	652'0	648'0	638'8	630'2	628'0	630'5	640'0	647'0	648'8	650'0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	658'0	658'0	654'0	646'5	634'8	632'8	635'0	640'5	661'3	651'7	643'8	651'0
	7	648'5	644'8	639'2	635'6	629'0	624'8	623'9	635'0	637'6	641'0	638'0	643'8
	8	639'8	632'4	637'8	629'0	616'0	597'2	608'5	620'0	626'0	621'0	636'0	627'5
	9	638'0	635'0	631'0	625'0	621'0	615'0	614'4	617'8	625'0	632'0	637'0	640'2
	10	642'0	644'0	644'0	640'0	632'0	623'0	618'0	620'2	628'2	635'5	639'2	643'0
	11	652'0	652'0	647'5	639'2	630'8	621'2	616'4	619'4	623'8	634'4	641'8	644'2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	618'8	619'2	611'4	611'0	629'0	626'8	623'4	632'0	640'0	641'5	646'5	648'0
	14	657'0	651'8	655'1	651'4	648'0	646'4	645'0	648'0	650'8	644'2	649'0	649'0
	15	658'0	655'0	643'0	621'0	613'5	612'3	631'0	632'5	658'0	655'0	651'7	640'2
	16	672'0	667'0	660'5	645'0	636'5	637'5	629'5	642'0	635'5	642'2	652'2	656'6
	17	607'0	617'0	607'0	598'8	587'5	607'8	626'4	629'3	653'0	657'1	648'4	648'0
	18	633'3	631'2	631'0	632'9	629'6	624'1	621'8	633'0	632'2	643'0	627'0	636'5
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	589'0	580'2	553'0	561'0	576'0	558'8	592'0	625'0	633'0	696'0	661'6	657'0
	21	616'0	612'0	611'0	611'4	602'0	602'0	603'0	613'0	608'5	618'0	619'0	617'4
	22	632'5	633'0	630'5	622'0	614'0	609'0	602'0	605'8	619'8	628'2	633'0	638'8
	23	635'5	631'4	626'8	623'0	613'0	610'0	609'6	612'6	619'0	615'8	629'2	633'0
	24	622'4	629'8	639'4	633'5	626'0	616'1	608'1	613'0	617'8	618'8	641'0	633'5
	25	633'7	632'0	603'0	597'0	596'0	618'0	608'5	618'0	616'0	619'0	622'0	628'5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	640'6	641'0	625'0	615'0	608'5	608'8	612'6	608'5	630'8	631'9	626'0	640'2
	28	642'0	639'0	635'8	629'0	623'0	613'5	613'5	623'8	638'0	626'0	637'4	637'6
	29	637'2	632'0	627'2	619'4	613'8	609'2	613'4	615'9	623'1	628'9	634'1	632'4
	30	635'4	634'2	633'8	627'9	617'1	610'7	612'0	620'0	628'8	634'0	645'0	635'0
	31	611'7	611'3	605'0	614'7	610'0	593'0	593'5	612'0	618'0	621'0	613'8	632'0
Hourly Means	639'66	637'81	632'37	626'31	621'53	617'49	617'72	625'39	633'10	638'10	640'23	640'95	
TEMPERATURE OF THE BILBAR MAGNET.													
MARCH.	1	42'2	41'4	42'2	42'7	43'3	41'3	45'3	45'7	45'9	45'6	45'8	45'7
	2	41'0	40'0	39'0	38'5	38'9	39'6	40'2	41'7	41'7	42'3	42'4	41'9
	3	39'8	39'8	39'2	39'0	39'7	41'3	42'2	43'0	41'0	45'0	45'0	45'3
	4	40'5	40'0	40'3	42'0	41'7	41'5	41'9	41'8	41'0	43'6	43'0	42'0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	38'4	38'5	39'0	39'7	39'4	41'2	41'6	42'2	43'2	44'6	46'0	46'2
	7	41'4	44'2	44'2	44'4	44'4	41'6	45'0	46'7	48'4	49'4	49'8	50'0
	8	48'6	48'2	48'6	48'6	49'0	50'0	51'0	51'7	51'9	52'5	53'2	52'5
	9	46'3	45'7	45'5	45'3	45'7	46'3	46'9	47'2	48'4	49'4	50'2	49'4
	10	42'0	41'5	41'5	42'4	41'0	45'0	45'7	45'8	47'0	48'2	50'2	49'2
	11	44'2	44'0	45'5	46'8	47'4	48'3	48'4	48'4	48'8	49'3	50'0	49'4
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	45'2	44'2	43'6	43'6	43'6	41'1	41'1	43'8	44'0	44'3	44'6	44'7
	14	39'8	40'1	40'1	40'8	40'8	41'0	41'0	41'5	41'6	41'7	41'9	41'9
	15	34'0	34'0	34'4	35'2	35'6	35'8	36'0	36'4	37'2	38'1	38'7	39'2
	16	34'5	34'7	35'7	36'4	37'0	38'0	39'0	39'4	40'2	40'6	41'6	41'7
	17	41'0	41'5	41'6	41'6	41'5	42'1	42'8	43'1	43'7	44'1	44'6	45'5
	18	41'4	41'5	41'6	43'7	45'0	46'3	46'6	47'0	47'4	47'4	47'5	47'5
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	44'8	44'4	44'4	44'0	44'5	45'7	46'0	46'3	46'2	47'3	47'3	47'2
	21	49'2	49'0	50'0	51'6	52'5	53'2	53'5	54'1	54'5	55'5	56'3	56'6
	22	48'8	48'8	49'2	49'5	49'8	50'5	51'0	51'2	51'3	51'4	51'6	51'9
	23	53'6	52'8	52'0	51'5	52'1	52'7	52'9	53'0	52'5	52'6	53'6	53'8
	24	47'6	48'4	49'3	50'0	50'5	51'2	51'5	52'0	52'5	53'4	55'0	54'0
	25	51'0	50'8	50'1	51'0	51'0	51'3	51'4	51'9	52'0	52'8	53'3	53'3
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	47'2	47'0	47'0	47'3	47'9	49'0	50'3	51'3	51'6	52'2	52'5	52'2
	28	47'2	47'5	48'0	48'5	49'9	51'0	51'9	52'1	52'4	53'0	53'8	54'4
	29	52'3	52'8	53'8	54'8	55'2	55'6	55'6	55'6	56'6	57'6	58'8	60'0
	30	52'2	52'6	53'0	54'0	54'5	54'7	54'7	55'0	55'0	55'4	55'4	55'5
	31	52'9	52'0	52'2	52'5	53'5	54'5	55'6	56'4	56'1	57'2	58'0	58'3
Hourly Means	44'86	44'64	44'85	45'39	46'02	46'76	47'26	47'68	48'07	48'69	49'22	49'23	

10h.		11h.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
610'0	641'0	610'0	641'0
616'0	650'0	616'0	650'0
650'5	651'2	650'5	651'2
618'8	650'0	618'8	650'0
643'8	651'0	643'8	651'0
638'0	643'8	638'0	643'8
636'0	627'5	636'0	627'5
637'0	610'2	637'0	610'2
641'8	638'4	641'8	638'4
639'2	643'0	639'2	643'0
641'8	644'2	641'8	644'2
646'5	648'0	646'5	648'0
641'2	649'0	641'2	649'0
651'7	640'2	651'7	640'2
652'2	656'6	652'2	656'6
648'4	648'0	648'4	648'0
627'0	636'5	627'0	636'5
661'6	657'0	661'6	657'0
619'0	617'4	619'0	617'4
633'0	638'8	633'0	638'8
629'2	633'0	629'2	633'0
641'0	633'5	641'0	633'5
622'0	628'5	622'0	628'5
626'0	640'2	626'0	640'2
637'4	637'6	637'4	637'6
631'1	632'4	631'1	632'4
645'0	635'0	645'0	635'0
643'8	632'0	643'8	632'0
610'23	640'95	610'23	640'95

HORIZONTAL FORCE.														
One Scale Division = .00087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.														
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
641'0	643'5	645'6	648'0	646'8	645'0	646'0	647'4	647'8	648'0	—	648'2	642'65		
651'0	654'0	652'0	652'0	653'0	653'8	651'0	655'0	654'7	654'6	656'0	655'8	646'67		
650'4	642'0	649'0	648'8	651'8	652'9	653'1	651'8	657'3	656'0	655'0	654'0	646'84		
652'3	657'1	656'8	656'6	657'0	657'2	—	—	—	—	—	—	651'07		
—	—	—	—	—	—	659'0	658'0	663'0	663'0	661'6	660'6	—		
643'8	646'0	646'2	644'0	642'0	642'4	645'5	640'5	644'0	645'0	645'0	645'0	645'80		
638'0	643'8	646'0	643'0	641'5	642'0	641'0	638'4	637'2	638'0	637'2	636'0	638'55		
636'0	627'5	626'0	630'0	627'8	628'8	623'2	634'1	631'6	633'7	636'1	635'8	628'22		
637'0	610'2	610'0	611'2	643'0	643'0	645'0	645'1	646'0	645'8	646'2	648'0	635'63		
641'8	638'4	647'3	647'8	647'0	649'0	648'1	651'0	652'0	650'0	651'2	652'0	641'76		
639'2	643'0	—	—	—	—	—	—	—	—	—	—	—		
641'8	644'2	—	—	—	—	—	—	—	—	—	—	—		
—	—	—	—	—	—	650'0	647'8	651'5	651'0	650'0	648'0	641'46		
646'5	648'0	650'6	651'0	652'0	651'5	652'0	657'0	655'0	657'4	659'5	657'2	646'37		
641'2	649'0	658'8	654'0	659'0	669'6	665'0	659'5	624'8	618'7	635'0	653'2	651'0	655'0	649'93
651'7	640'2	650'6	653'0	651'8	653'8	651'2	650'2	654'0	643'8	659'0	657'4	657'0	655'0	650'23
652'2	656'6	655'4	658'2	647'2	642'8	643'4	610'0	606'4	611'0	608'5	626'5	610'4	590'0	636'93
648'4	648'0	650'2	643'4	631'0	626'5	635'0	635'0	636'2	636'8	638'0	639'0	637'8	630'80	
627'0	636'5	641'0	620'8	630'0	631'0	630'0	632'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
661'6	657'0	610'0	617'0	620'2	591'0	598'2	588'4	570'0	583'6	588'6	623'2	583'5	621'55	—
619'0	617'4	608'8	616'4	620'8	622'8	623'5	623'7	625'5	626'2	630'0	631'8	631'0	631'0	607'63
633'0	638'8	625'0	622'4	617'0	621'8	628'0	625'0	633'6	630'3	632'0	633'0	633'0	633'0	617'82
629'2	633'0	629'0	634'0	628'5	624'5	632'0	634'0	631'8	631'0	633'5	630'8	625'0	611'2	626'55
641'0	633'5	639'0	630'0	626'5	625'0	620'0	587'5	611'0	630'5	631'2	629'5	629'4	623'91	—
622'0	628'5	611'0	—	—	—	—	—	—	—	—	—	—	—	620'11
—	—	622'4	633'2	637'4	636'2	637'4	613'8	631'0	632'8	630'0	642'5	640'0	643'5	629'66
626'0	640'2	638'3	633'5	637'4	626'5	628'0	632'0	630'8	633'0	639'5	635'4	640'5	638'0	632'13
637'4	637'6	630'0	630'0	633'0	625'0	629'8	630'2	641'7	631'0	634'0	633'0	635'0	631'5	627'66
631'1	632'4	645'0	626'0	622'0	628'5	643'0	630'0	632'8	618'8	609'0	617'5	604'8	605'0	625'26
645'0	635'0	611'5	626'0	622'0	600'0	602'3	605'2	611'0	615'0	622'0	612'1	621'5	620'2	614'45
610'23	640'95	638'62	637'97	637'36	636'63	636'46	634'42	633'84	631'28	631'60	630'67	628'56	637'27	633'50

TEMPERATURE OF THE BILAR MAGNET.														
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
45'8	45'7	45'4	44'7	44'0	44'0	44'0	43'2	43'3	43'3	—	42'5	44'06		
42'4	41'9	42'0	42'4	41'6	41'2	41'0	40'0	40'0	39'6	40'0	40'0	39'8	40'70	
45'0	45'3	44'6	43'2	42'6	42'4	41'6	41'2	40'8	40'4	41'0	41'2	41'4	41'85	
43'0	42'0	41'2	40'4	40'1	40'0	39'8	39'5	—	—	—	—	—	—	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	
46'0	46'2	46'2	45'2	44'4	44'0	44'0	43'5	43'9	43'5	43'8	43'5	44'4	44'6	43'02
49'8	49'8	49'8	49'5	49'0	49'0	49'0	49'2	49'2	49'0	48'8	48'9	48'7	47'75	
53'2	52'5	52'0	51'5	51'1	51'0	50'4	50'0	49'5	49'5	48'7	47'6	47'1	46'6	50'23
50'0	49'4	48'6	47'6	46'6	46'2	46'0	45'5	45'1	44'9	44'8	44'8	44'0	43'0	46'38
49'2	49'2	49'1	47'5	46'5	45'2	44'7	43'6	43'0	44'0	44'5	44'6	44'6	44'5	45'14
50'0	49'4	49'1	48'5	48'2	47'5	47'5	47'4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
41'6	41'7	41'7	41'0	40'6	40'4	40'0	42'0	42'0	42'2	42'1	41'6	41'3	41'3	43'36
41'9	40'5	40'5	39'0	38'0	36'8	36'2	36'3	36'6	37'0	36'5	35'5	34'7	34'2	38'94
38'7	39'2	39'4	38'4	37'6	36'5	35'6	34'6	34'6	34'3	34'2	34'1	34'4	34'1	35'93
41'6	41'7	40'5	39'5	39'2	39'0	39'0	38'8	38'7	39'3	39'5	40'5	41'7	41'5	39'00
44'6	44'6	45'6	44'6	44'4	43'4	43'4	43'4	42'7	42'0	41'5	42'0	42'0	41'9	42'93
47'5	47'5	48'0	47'9	48'3	48'3	48'2	48'0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
47'3	47'2	48'2	48'4	48'6	48'6	48'6	48'8	49'0	49'1	49'0	49'0	49'0	49'0	47'22
56'3	56'6	56'1	55'4	54'4	53'2	52'5	52'0	51'5	51'0	50'3	50'0	50'0	49'3	52'58
51'6	51'9	51'6	51'1	50'6	50'5	50'5	50'6	50'7	51'5	52'4	52'9	53'1	53'5	51'00
53'6	53'8	54'0	53'4	52'9	52'1	51'6	51'3	51'0	50'4	50'0	49'5	49'1	48'8	51'97
55'0	54'0	54'3	53'6	53'2	52'5	52'5	53'0	53'0	52'5	52'0	51'5	51'5	51'2	51'92
53'3	53'3	53'5	53'5	53'5	53'6	53'5	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
52'5	52'2	52'3	51'5	50'6	50'3	50'0	49'6	49'2	48'8	48'4	48'0	47'7	48'0	49'38
53'8	54'4	54'4	53'8	53'3	52'8	52'5	52'4	52'2	51'8	51'7	51'9	52'0	52'3	51'70
58'8	60'0	60'4	59'6	58'6	56'8	56'0	55'2	54'8	54'4	54'4	54'0	53'0	52'6	55'77
55'4	55'5	55'7	54'8	54'5	54'4	54'4	53'9	53'5	53'4	53'2	53'0	53'1	53'0	54'42
58'0	58'3	58'5	58'4	58'0	57'6	57'6	57'2	56'3	55'3	54'0	53'5	53'3	53'0	55'50
49'22	49'23	49'11	48'42	47'94	47'43	47'15	46'88	46'07	45'94	45'81	45'78	45'83	45'56	46'86

HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
APRIL.	1	630'0	620'0	619'0	614'5	613'0	612'0	617'5	623'8	629'8	633'0	635'2	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	605'0	618'0	611'0	588'5	594'0	592'0	602'5	621'4	620'8	632'8	665'4	634'0
	4	623'0	614'0	617'5	610'2	597'8	593'5	603'2	606'8	618'8	626'6	626'4	628'0
	5	631'8	625'0	623'2	616'9	608'2	601'6	598'9	601'8	615'0	635'0	625'0	640'0
	6	624'3	627'2	610'0	600'5	601'0	598'0	594'0	595'0	613'0	620'0	628'5	633'0
	7	598'0	575'0	568'0	562'0	581'5	585'6	579'5	575'0	606'0	624'5	640'0	631'2
	8	621'0	619'0	618'0	611'0	607'0	607'0	607'8	606'8	610'4	621'8	619'8	620'0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	628'0	630'5	627'0	618'0	608'4	598'2	596'2	601'0	605'0	610'6	617'3	621'0
	11	625'8	620'0	621'2	617'0	612'5	604'5	610'0	608'0	620'0	624'5	625'5	623'0
	12	627'6	631'2	622'4	623'2	619'0	624'0	623'3	627'0	621'8	626'0	625'0	624'8
	13	631'0	630'8	627'0	618'0	615'8	615'6	615'0	618'0	624'0	634'0	636'7	638'2
	14	643'0	642'0	635'2	627'9	621'0	619'0	620'2	623'0	626'8	633'8	638'8	639'2
	15	645'2	639'3	621'0	626'5	617'2	613'8	618'4	621'0	637'8	640'2	637'0	639'0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	625'4	628'0	626'6	618'0	613'4	610'6	618'4	621'0	624'0	638'5	640'0	652'0
	18	630'0	627'5	619'2	616'0	609'0	612'0	622'0	627'0	633'0	635'2	628'0	638'0
	19	636'0	640'0	635'0	631'0	624'0	621'3	626'8	630'0	641'0	641'0	642'4	645'0
	20	643'0	641'5	638'2	630'0	623'5	618'0	624'0	622'0	628'0	631'0	639'2	633'8
	21 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	22	626'2	624'0	603'0	603'0	603'0	611'5	608'0	612'5	613'5	614'0	624'0	621'0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	639'0	638'8	635'0	628'0	621'0	615'0	626'0	629'0	634'8	636'0	634'0	638'0
	25	643'0	642'0	629'0	621'0	617'0	625'0	629'0	630'0	635'2	637'8	637'8	637'9
	26	644'0	640'0	630'0	618'2	611'2	613'8	620'4	629'0	634'0	637'0	637'3	638'0
	27	646'4	646'0	638'2	629'1	626'8	631'0	636'0	639'0	641'0	641'5	643'0	642'0
	28	644'0	642'0	635'8	628'0	626'5	632'1	638'2	647'0	648'5	652'0	651'0	646'5
	29	621'5	620'8	630'0	621'8	589'0	589'0	618'0	637'5	619'0	639'2	637'5	640'2
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	630'78	628'50	623'20	616'43	611'30	610'70	615'62	619'90	625'57	632'57	635'36	634'91	

TEMPERATURE OF THE BIPOLAR MAGNET.													
APRIL.	1	52'0	52'0	51'9	50'5	50'3	50'7	51'0	50'6	50'4	50'4	50'4	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	45'3	45'8	47'3	48'5	49'5	51'0	51'5	52'1	52'2	52'4	52'8	53'0
	4	53'4	53'4	53'0	53'2	53'4	53'6	53'6	53'7	53'8	54'0	54'0	53'7
	5	51'2	51'6	52'0	52'4	52'9	53'5	53'9	54'0	54'2	54'6	54'9	55'3
	6	50'0	50'4	51'4	52'2	53'2	54'0	54'2	54'5	55'2	56'3	57'3	57'5
	7	54'0	54'0	54'9	55'7	56'1	56'5	56'6	56'6	56'6	57'0	57'9	58'0
	8	50'8	51'7	52'5	53'5	54'4	55'0	55'5	55'8	56'8	57'6	58'7	59'2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	51'5	55'4	55'9	58'0	59'2	59'4	60'2	61'0	62'0	62'7	63'5	64'9
	11	59'6	59'4	58'6	58'5	58'4	58'8	59'2	59'2	59'5	59'5	59'4	59'0
	12	54'1	55'2	56'0	56'2	57'0	57'5	57'5	58'2	58'5	59'1	60'0	60'0
	13	54'5	54'5	54'2	53'5	53'5	53'5	53'5	54'0	54'0	54'0	54'0	54'1
	14	49'9	50'4	50'7	51'2	51'5	52'0	52'8	53'2	53'6	54'0	54'6	54'5
	15	51'5	52'9	54'0	54'8	55'5	56'6	56'6	56'6	57'2	58'0	58'9	59'9
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	52'8	53'4	54'0	54'1	54'1	54'6	55'0	55'2	56'0	56'3	56'3	56'6
	18	50'0	49'5	49'3	49'6	49'6	50'5	50'7	50'3	49'5	49'5	49'5	49'0
	19	41'0	44'2	45'8	47'5	48'0	48'9	49'7	50'0	50'4	50'9	51'7	51'9
	20	47'4	48'0	49'2	49'8	50'3	51'0	51'4	51'8	52'4	53'0	54'0	54'7
	21 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	22	53'4	53'0	53'0	52'9	53'3	53'6	54'2	54'7	55'8	56'2	56'8	57'3
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	47'4	47'4	47'9	48'0	48'2	49'0	49'5	50'1	50'6	51'2	51'2	51'0
	25	46'2	47'6	49'0	50'0	50'0	50'4	50'9	51'2	52'0	52'4	52'6	52'6
	26	50'0	51'0	52'2	52'6	53'0	53'0	53'0	52'8	53'0	53'0	53'5	54'4
	27	49'4	49'8	50'7	51'7	52'4	53'0	53'6	54'0	54'5	55'4	56'0	56'3
	28	52'1	52'0	51'5	51'3	51'5	52'0	52'2	52'5	52'6	53'4	54'0	54'0
	29	53'2	53'5	53'5	53'4	53'7	54'2	54'5	55'3	55'5	56'2	56'9	57'0
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	51'16	51'55	52'05	52'47	52'86	53'40	53'77	54'04	54'40	54'82	55'29	55'69	

<sup>a</sup> Good Friday.



HORIZONTAL FORCE.													
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
MAY.	1	627.5	628.0	626.0	612.0	617.0	611.5	612.2	616.2	626.2	634.6	651.8	638.4
	2	638.0	638.0	633.0	614.8	608.5	605.5	620.5	630.0	640.8	637.1	642.0	643.0
	3	635.2	633.2	617.2	619.0	610.0	606.9	611.3	620.0	628.5	630.0	625.0	630.0
	4	631.0	630.0	623.8	620.5	605.0	598.0	612.0	626.0	639.0	648.0	630.0	635.5
	5	632.0	632.0	623.0	612.5	603.0	601.0	603.0	612.0	615.0	621.0	631.0	624.6
	6	623.0	610.0	619.5	603.2	607.0	595.0	598.0	600.8	606.4	621.2	616.0	611.0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	600.0	597.0	597.5	585.0	591.8	590.4	600.5	603.7	611.2	625.0	622.2	630.0
	9	618.2	616.0	605.4	602.0	608.6	608.0	625.0	621.2	623.0	633.0	616.0	628.0
	10	611.5	596.0	579.0	597.0	589.5	614.0	585.5	602.0	599.0	614.0	619.8	625.0
	11	622.0	619.2	620.0	610.0	610.0	607.5	607.0	610.0	618.5	623.5	624.0	623.8
	12	636.5	635.5	629.0	623.5	621.0	616.0	633.5	635.0	640.8	644.2	633.0	626.1
	13	628.0	623.0	618.0	615.4	610.5	612.2	616.0	627.0	627.0	637.1	635.8	634.5
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	642.2	636.8	624.4	618.0	616.2	618.2	623.0	632.0	640.0	642.0	638.0	638.0
	16	635.9	624.7	626.9	619.0	613.0	616.0	625.0	626.0	640.5	642.2	635.0	632.5
	17	631.0	633.0	625.0	611.0	609.5	603.0	617.0	625.0	635.0	630.8	658.0	643.4
	18	595.4	617.0	611.0	612.0	607.0	605.0	599.0	582.2	621.5	622.8	629.2	612.8
	19	595.5	612.0	593.0	574.2	575.0	578.2	591.8	586.1	593.2	603.0	614.2	605.0
	20	600.4	598.6	595.0	584.9	591.0	605.8	595.0	603.0	610.0	605.8	608.0	611.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	621.8	626.7	620.0	607.8	600.0	598.8	606.0	619.8	618.5	621.5	610.0	620.0
	23	621.0	623.0	622.8	611.0	609.0	597.5	598.0	603.0	611.0	618.0	617.2	621.4
	24	630.5	627.0	611.5	610.0	606.4	609.0	610.0	616.8	621.8	591.2	612.2	614.0
	25	616.0	606.0	607.0	611.2	606.0	600.4	603.2	610.4	616.1	625.0	615.0	626.5
	26	610.0	612.2	612.4	604.3	604.0	601.1	607.0	619.8	621.0	618.8	621.0	619.0
	27	617.0	608.0	588.5	597.0	588.0	598.5	602.0	616.9	611.0	627.2	638.0	647.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	608.0	612.0	610.8	589.0	591.8	600.0	602.5	605.0	607.0	610.2	611.0	612.2
	30	615.5	613.0	606.0	601.0	598.0	609.0	601.0	606.5	613.2	618.8	617.8	614.3
	31	630.9	627.5	631.6	617.2	606.8	612.8	620.5	617.2	618.2	633.6	636.0	619.8
Hourly Means	621.63	619.46	613.97	606.87	603.58	601.31	608.46	613.84	620.83	625.17	626.30	625.46	
TEMPERATURE OF THE BIPOLAR MAGNET.													
MAY.	1	50.7	50.6	50.7	51.5	52.2	53.3	53.6	53.7	53.8	51.0	51.4	51.6
	2	52.0	52.2	52.5	53.6	54.6	55.6	56.2	57.0	58.0	59.0	59.2	59.2
	3	56.0	57.0	57.8	58.7	60.0	60.5	60.7	61.0	61.8	62.4	62.4	62.7
	4	57.2	57.5	57.8	58.4	59.7	60.5	61.2	60.8	60.6	60.2	60.1	59.6
	5	59.7	60.5	62.0	63.5	64.4	65.2	66.0	66.7	67.5	67.3	68.6	68.4
	6	63.5	61.3	61.8	65.5	66.0	66.8	67.5	68.2	68.8	69.8	70.4	70.6
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	59.5	59.5	59.9	60.8	60.5	60.8	61.2	61.5	62.0	62.4	62.9	63.0
	9	58.0	58.5	59.2	60.0	60.7	61.0	61.4	61.8	62.2	62.4	62.0	62.0
	10	58.7	59.5	60.5	61.2	62.2	62.2	62.2	62.5	62.4	62.4	62.5	62.4
	11	57.6	57.5	57.0	57.3	57.6	58.2	58.5	58.0	58.0	57.8	58.0	58.2
	12	53.6	51.3	55.1	56.0	57.0	57.6	58.0	58.6	59.2	59.8	60.6	61.0
	13	54.0	53.8	53.5	53.6	53.8	53.3	53.0	53.9	54.1	55.0	55.7	54.9
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	52.6	53.5	54.3	55.0	56.1	56.9	57.7	58.2	58.8	58.8	58.6	58.3
	16	56.6	56.7	57.0	57.4	58.2	58.9	59.4	59.5	60.0	60.3	60.7	61.0
	17	56.1	56.7	57.8	58.7	59.7	60.4	60.8	61.5	62.4	63.4	61.0	61.4
	18	58.8	60.0	60.9	62.0	62.5	63.0	63.5	64.4	65.0	66.2	67.2	67.6
	19	62.5	62.5	63.2	64.4	66.0	67.0	68.3	69.2	69.9	70.5	70.5	70.5
	20	65.0	64.8	65.1	65.9	66.9	67.7	68.8	69.0	69.6	69.7	69.7	69.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	64.0	63.7	63.6	63.8	64.5	64.5	65.6	65.0	65.7	66.3	66.2	66.1
	23	62.4	62.0	62.3	62.3	62.1	62.6	62.6	62.4	62.5	63.0	63.4	63.5
	24	60.9	61.5	62.0	62.2	63.2	64.0	64.9	65.9	67.0	67.6	68.6	71.2
	25	63.5	64.0	64.0	64.6	64.8	65.8	67.0	67.6	68.5	69.6	71.1	71.2
	26	61.2	61.9	65.6	66.0	66.5	66.7	67.0	67.2	68.0	68.4	70.4	70.3
	27	62.2	62.8	63.5	64.2	65.1	65.8	66.1	66.5	67.2	68.0	68.5	63.5
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	65.3	65.5	66.1	66.5	67.5	67.7	68.5	69.2	69.5	70.3	71.0	71.8
	30	66.3	66.8	67.4	68.0	68.5	68.5	68.5	68.8	69.2	69.2	68.9	68.6
	31	59.5	60.0	60.5	60.8	61.0	60.9	60.9	61.0	61.0	62.0	62.4	62.4
Hourly Means	59.27	59.65	60.15	60.81	61.53	62.05	62.55	62.92	63.40	63.90	64.37	64.65	

12h. Sc. Div. 641.0 640.0 630.0 634.2 626.4 620.0 — 631.2 622.5 620.0 627.0 625.9 635.8 — 635.0 637.0 618.2 622.3 597.0 604.0 — 616.0 622.8 639.0 617.0 619.0 628.0 — 624.94 53.0 59.0 62.8 59.5 67.6 70.2 — 62.6 62.0 62.0 62.4 62.0 68.0 70.2 69.5 — 66.3 63.6 70.5 71.0 70.3 69.0 — 72.6 68.1 62.4 — 64.43

1' 63.

10 <sup>h</sup> .	11 <sup>h</sup> .
51'8	638'4
42'0	643'0
25'0	630'0
30'0	635'5
31'0	624'6
16'0	611'0
22'2	630'0
16'0	628'0
19'8	625'0
24'0	623'8
35'0	626'1
35'8	634'5
38'0	638'0
35'0	632'5
58'0	643'4
29'2	612'8
14'2	605'0
08'0	611'5
10'0	620'0
17'2	621'4
12'2	614'0
15'0	626'5
21'0	619'0
38'0	647'0
14'0	612'2
17'8	614'3
36'0	619'8
26'30	625'46

HORIZONTAL FORCE.  
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
641'0	630'9	634'0	635'0	631'9	638'0	638'4	623'0	628'8	632'0	630'0	636'5	629'33
640'0	637'0	622'0	616'0	617'0	614'4	617'0	625'8	627'0	628'0	625'0	631'2	627'15
632'0	623'0	624'5	628'0	625'0	622'1	624'1	625'8	626'2	630'0	618'5	639'0	624'35
634'2	630'0	631'5	627'2	630'0	630'8	631'5	631'2	631'4	627'0	631'0	632'0	627'77
626'4	612'2	612'8	617'1	610'8	615'9	619'2	618'4	615'0	616'2	617'8	621'0	617'33
620'0	615'0	617'8	608'5	608'8	609'4	—	—	—	—	—	—	610'17
—	—	—	—	—	—	614'0	608'5	601'5	603'0	611'0	615'5	606'69
631'2	611'0	607'0	597'5	605'2	598'5	602'0	598'5	602'5	616'5	618'0	618'4	618'33
622'5	622'0	621'8	621'0	620'0	620'0	623'0	621'2	622'0	623'2	614'8	604'0	606'70
620'0	611'7	617'5	608'0	602'0	605'0	608'8	606'0	597'1	610'0	619'0	618'4	623'30
627'0	626'8	622'0	633'0	631'3	634'0	629'0	627'8	632'0	631'8	632'0	637'0	627'75
625'9	626'1	621'2	624'5	621'0	615'0	615'4	627'6	628'0	625'0	627'2	629'0	630'00
635'8	632'2	633'0	635'5	633'0	638'0	—	—	—	—	—	—	633'75
—	—	—	—	—	—	636'0	636'0	637'1	637'0	639'0	642'8	630'36
635'0	635'0	631'0	635'0	637'3	639'0	638'0	636'8	638'2	637'8	637'0	638'0	613'28
637'0	629'5	630'5	630'8	636'6	633'8	635'8	633'9	630'0	629'0	633'0	632'0	605'00
618'2	634'2	631'8	627'1	597'1	601'0	592'0	515'2	546'5	606'5	621'0	603'5	616'42
622'3	780'0	666'3	597'0	613'0	600'0	599'0	597'5	591'0	601'5	603'5	605'0	600'00
597'0	605'0	604'0	603'0	601'5	609'5	625'0	603'0	614'6	612'0	597'5	599'8	604'40
604'0	608'0	606'1	612'0	609'5	610'0	—	—	—	—	—	—	615'73
—	—	—	—	—	—	612'2	593'5	609'8	609'2	610'0	609'2	610'00
616'0	616'0	617'0	615'8	616'0	616'2	616'4	615'5	617'5	619'2	620'0	621'0	612'48
622'8	620'2	621'4	622'8	623'9	621'3	627'9	627'4	630'0	630'8	623'5	631'0	608'78
639'0	609'0	605'8	606'0	606'0	607'2	607'0	610'5	608'5	612'0	613'0	612'0	612'41
617'0	605'0	605'4	606'0	607'0	600'0	587'0	601'0	608'2	610'0	610'0	608'4	612'22
619'0	616'0	617'2	619'0	607'0	613'2	634'5	597'8	585'0	603'7	616'8	616'0	608'06
628'0	611'0	606'5	615'4	616'2	618'0	—	—	—	—	—	—	621'66
—	—	—	—	—	—	609'0	609'0	610'0	610'2	609'0	608'8	624'15
609'2	611'0	612'2	612'0	611'9	611'1	608'3	610'2	610'8	610'0	612'2	612'0	612'55
613'0	612'2	616'3	618'0	618'4	618'8	613'0	619'0	613'0	613'0	621'0	620'0	617'48
640'0	636'2	638'0	612'0	608'0	611'0	625'0	627'0	622'5	628'2	631'2	628'5	—
624'94	626'16	621'50	617'90	616'83	616'82	618'09	612'86	614'34	618'99	620'07	621'11	—

TEMPERATURE OF THE BIFLAR MAGNET.

51'4	51'6
59'2	59'2
62'4	62'7
60'1	59'6
68'6	68'4
70'4	70'6
—	—
62'9	63'0
62'0	62'0
62'5	62'4
58'0	58'2
60'6	61'0
55'7	51'9
—	—
58'6	58'3
60'7	61'0
61'0	61'4
67'2	67'6
70'5	70'5
69'7	69'5
—	—
66'2	66'1
63'4	63'5
58'6	74'2
71'1	71'2
70'4	70'3
58'5	69'5
—	—
71'0	71'8
68'9	68'6
62'4	62'4
64'37	64'65

55'0	51'6	51'4	51'0	51'0	51'3	51'8	53'0	53'0	52'5	52'4	52'3	52'0	53'07
59'0	58'8	58'5	57'5	57'3	56'8	56'3	56'3	56'3	56'3	56'3	56'0	56'0	56'43
62'8	62'0	61'8	61'5	61'4	61'0	60'2	59'8	59'2	59'0	59'0	58'2	57'1	60'13
59'5	59'4	59'1	59'3	59'1	59'2	59'3	59'2	59'2	59'4	59'4	59'3	59'3	59'39
67'6	66'7	66'0	65'5	65'3	61'6	61'5	61'3	63'8	63'2	63'0	62'5	61'87	
70'2	70'0	69'0	68'5	68'4	68'0	—	—	—	—	—	—	—	66'12
—	—	—	—	—	—	62'5	62'0	61'3	60'9	60'3	59'5	59'5	60'67
62'6	62'4	61'8	61'3	60'8	60'4	60'0	59'5	59'0	58'6	58'0	57'6	57'6	60'52
62'0	61'5	61'0	60'6	60'5	60'4	60'2	60'0	59'7	59'4	59'4	58'6	58'6	60'61
62'0	61'5	61'0	60'6	60'2	59'6	59'2	58'9	58'7	58'3	58'0	58'0	57'07	57'40
58'5	58'2	57'6	57'5	57'0	56'6	56'2	55'9	55'2	51'8	54'5	53'9	53'9	57'40
61'0	60'2	59'5	58'6	58'2	57'2	56'8	56'0	55'5	55'0	54'9	54'0	54'0	53'40
54'1	53'3	52'8	52'6	52'3	52'0	—	—	—	—	—	—	—	53'40
—	—	—	—	—	—	53'0	52'9	52'8	52'5	52'5	52'3	52'3	56'91
58'3	58'0	57'5	57'4	57'2	57'0	57'0	57'0	56'7	56'9	57'0	57'0	57'0	58'57
61'0	60'5	60'0	60'0	59'2	58'4	57'8	57'5	57'0	56'6	56'2	55'8	55'8	60'86
64'4	63'6	63'0	62'4	62'0	61'0	60'5	60'0	59'8	59'7	59'4	58'8	58'8	64'40
68'0	68'0	67'5	66'9	66'5	65'5	64'8	64'3	63'6	63'5	63'5	62'5	62'5	67'23
70'2	70'0	69'5	68'0	67'6	67'2	67'0	66'5	66'3	66'0	65'5	65'2	65'2	66'90
69'5	69'0	68'8	68'2	67'9	67'5	—	—	—	—	—	—	—	64'59
—	—	—	—	—	—	63'6	63'5	63'9	63'8	64'0	64'2	64'2	62'23
66'3	66'0	65'5	65'3	65'0	64'4	63'8	63'4	63'0	63'0	60'8	60'9	60'9	66'07
63'6	63'4	63'0	62'6	62'0	61'5	61'5	61'3	61'0	60'8	64'5	64'4	64'4	66'65
70'5	69'9	69'5	69'0	67'8	67'0	66'5	65'6	65'0	64'6	63'2	63'0	63'0	66'41
71'0	71'0	69'3	68'6	67'6	67'1	66'6	66'0	65'5	65'0	64'5	64'4	64'4	68'99
70'3	69'0	68'1	67'8	67'2	66'6	65'7	65'2	64'5	63'9	63'2	63'0	63'0	65'85
69'0	68'9	68'0	67'7	67'4	67'0	—	—	—	—	—	—	—	60'52
—	—	—	—	—	—	67'0	66'5	66'0	65'9	65'6	65'4	65'4	—
72'6	72'2	71'6	71'2	70'7	70'0	69'3	69'0	68'6	68'0	67'2	66'5	66'5	—
68'1	67'2	66'0	65'5	64'5	64'0	63'3	62'0	61'0	60'5	60'0	59'5	59'5	—
62'4	62'2	61'8	61'3	60'8	60'4	60'1	59'4	58'8	58'1	57'5	57'2	57'2	—
64'43	63'98	63'40	62'94	62'51	61'99	61'32	60'93	60'51	60'23	59'93	59'55	61'96	—



HORIZONTAL FORCE.												12h.		
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.														
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.	
JUNE.	1	631'8	624'4	621'2	611'3	603'6	606'5	618'4	626'0	630'0	631'0	628'0	626'0	625'0
	2	621'0	618'8	616'0	607'0	595'0	597'4	607'8	620'0	625'0	629'0	628'5	625'2	624'0
	3	617'0	614'8	606'5	598'3	591'5	597'0	600'0	606'5	616'0	619'0	623'0	626'5	620'2
	4	—	—	—	—	—	—	—	—	—	—	—	—	628'0
	5	616'0	612'0	601'2	604'0	597'0	594'0	601'0	606'0	610'4	622'2	621'2	621'2	629'0
	6	620'5	619'0	616'0	614'8	599'9	605'0	601'2	614'1	616'1	621'4	626'8	629'0	625'0
	7	635'2	631'8	625'0	618'1	612'0	613'0	613'0	625'0	633'5	632'5	631'0	631'0	627'0
	8	629'8	623'1	620'0	616'0	610'0	602'0	615'0	622'0	625'0	628'0	626'0	627'0	621'2
	9	628'0	627'0	624'2	620'0	617'6	618'0	624'0	631'2	634'0	625'0	625'2	619'8	616'0
	10	624'0	619'5	617'0	611'0	609'0	622'0	622'5	632'2	641'5	625'8	628'5	635'0	626'0
	11	—	—	—	—	—	—	—	—	—	—	—	—	632'0
	12	622'0	626'5	622'5	613'8	604'2	602'2	614'8	627'0	630'5	631'8	631'4	623'0	621'0
	13	639'5	636'0	630'0	626'2	608'0	608'0	612'0	611'6	628'0	637'0	636'0	634'0	621'0
	14	637'0	638'8	637'0	632'5	618'0	599'0	619'0	637'5	639'5	662'5	651'0	647'0	602'2
	15	628'0	624'0	622'0	610'0	608'5	610'0	608'7	612'0	613'1	622'0	606'0	609'2	594'2
	16	607'0	602'0	597'3	594'0	589'0	591'8	591'2	596'2	596'0	600'2	602'2	597'0	395'5
	17	602'8	604'2	598'4	590'0	589'0	587'5	592'0	596'0	596'2	600'0	601'2	599'0	605'0
	18	—	—	—	—	—	—	—	—	—	—	—	—	621'0
	19	615'8	615'2	606'0	598'0	591'4	582'0	587'0	604'0	617'5	616'0	625'0	629'0	601'2
	20	600'0	612'0	612'0	604'0	599'0	598'5	601'0	607'0	617'0	603'0	610'2	611'9	628'0
	21	617'5	605'0	595'0	596'0	593'2	595'0	607'5	628'0	630'0	632'0	625'4	624'2	614'0
	22	605'5	588'8	604'5	598'0	589'0	585'0	587'0	602'1	604'0	643'0	656'0	627'5	608'0
	23	607'0	608'0	606'8	595'5	589'0	589'0	598'0	610'0	620'0	622'0	618'2	619'0	614'0
	24	613'0	613'2	607'0	601'0	594'0	601'0	612'0	612'0	618'0	622'0	623'6	622'0	607'0
	25	—	—	—	—	—	—	—	—	—	—	—	—	604'0
	26	603'0	605'0	603'8	600'0	586'0	587'0	595'0	598'5	612'0	608'0	625'0	613'0	609'4
	27	608'0	603'5	599'5	590'0	590'5	594'0	591'0	597'0	607'0	602'0	606'0	606'2	610'0
	28	609'0	607'0	600'0	590'8	591'8	596'2	607'8	613'8	611'2	609'2	614'4	616'0	608'0
	29	616'2	607'0	598'2	592'0	592'0	591'2	602'0	610'0	608'0	605'0	614'0	618'0	615'50
	30	615'0	613'2	605'0	606'5	594'0	600'0	607'5	605'0	604'0	618'0	612'0	611'8	—
Hourly Means	618'06	615'38	611'31	605'31	598'20	598'93	605'36	613'49	618'60	622'60	622'90	621'10	—	
TEMPERATURE OF THE BIPOLAR MAGNET.														
JUNE.	1	57'4	58'4	59'4	60'0	60'4	61'2	61'5	62'2	62'4	63'2	63'5	63'6	
	2	58'8	59'6	60'8	62'0	63'5	64'0	64'2	64'9	65'4	66'1	67'2	67'4	
	3	61'5	65'3	65'6	66'3	67'4	68'3	69'3	70'0	70'0	71'0	71'3	71'2	
	4	—	—	—	—	—	—	—	—	—	—	—	—	
	5	65'6	66'3	67'3	67'5	67'9	68'0	68'3	68'3	68'2	68'2	68'4	68'2	
	6	61'9	61'9	61'9	62'0	61'9	62'0	62'2	62'6	63'0	63'3	63'9	64'2	
	7	58'6	59'2	59'8	60'3	61'0	61'0	61'5	62'0	62'8	63'4	64'2	65'2	
	8	59'1	60'0	61'0	62'0	63'4	64'2	64'5	65'1	65'7	66'5	67'0	67'4	
	9	62'7	64'0	64'4	65'2	66'3	66'8	67'3	68'0	68'7	69'8	70'4	70'8	
	10	66'3	66'4	67'3	68'0	68'7	69'0	69'7	69'9	70'2	70'8	71'0	71'0	
	11	—	—	—	—	—	—	—	—	—	—	—	—	
	12	61'9	62'0	62'4	62'8	63'0	62'8	62'5	62'4	62'9	63'5	64'2	64'6	
	13	58'4	59'0	59'1	60'0	60'7	61'0	61'0	61'5	62'2	62'5	63'0	63'7	
	14	57'6	57'1	57'8	57'8	58'0	59'3	59'7	59'7	60'5	61'0	61'8	62'6	
	15	60'8	61'9	63'6	65'0	67'4	70'0	72'5	75'0	76'9	78'5	80'2	80'4	
	16	74'5	75'0	76'5	77'6	78'7	79'6	80'8	81'4	81'9	82'8	83'0	82'2	
	17	75'0	75'4	75'6	76'2	77'5	78'7	79'5	79'8	79'5	79'9	80'3	79'5	
	18	—	—	—	—	—	—	—	—	—	—	—	—	
	19	73'0	72'8	73'7	73'9	74'3	74'5	75'8	76'4	76'7	76'6	76'5	76'5	
	20	72'0	72'4	72'5	73'3	73'5	74'0	74'3	74'5	74'8	75'1	75'4	74'5	
	21	69'0	69'3	69'3	69'5	69'9	69'9	70'0	70'2	70'5	71'0	71'8	72'1	
	22	67'4	67'0	67'5	68'5	69'4	70'0	70'5	71'4	71'7	72'2	72'3	72'6	
	23	67'6	67'8	67'8	68'0	68'2	70'0	70'7	71'8	73'8	74'0	74'0	72'6	
	24	67'2	67'5	68'3	69'0	69'5	70'3	70'3	70'5	70'8	71'5	72'3	72'5	
	25	—	—	—	—	—	—	—	—	—	—	—	—	
	26	70'0	71'0	71'9	72'3	73'8	74'6	75'7	76'5	77'6	78'2	78'7	78'7	
	27	70'8	71'0	71'6	72'5	72'9	73'9	71'3	75'0	76'0	76'4	77'0	76'5	
	28	73'0	73'0	73'0	73'4	73'6	73'5	73'8	73'8	73'8	74'4	74'6	74'3	
	29	69'4	69'6	70'8	72'0	72'8	72'8	2'6	72'9	73'8	74'4	74'8	75'3	
	30	69'0	69'6	70'2	71'0	71'0	72'2	2'6	73'5	74'4	74'5	75'3	75'2	
Hourly Means	65'83	65'26	66'90	67'54	68'26	68'91	69'43	69'97	70'55	71'12	71'62	71'63		

ure, 1' 63.

10h.	11h.
628°0	626°0
628°5	625°2
623°0	626°5
621°2	621°2
626°8	629°0
631°0	631°0
626°0	627°0
625°2	619°8
628°5	635°0
631°1	623°0
636°0	631°0
625°4	624°2
625°0	627°5
618°2	619°0
623°6	622°0
625°0	629°0
610°2	611°9
614°4	616°0
614°0	618°0
612°0	611°8
622°00	621°10

HORIZONTAL FORCE.													Daily and Monthly Means.
One Scale Division = '000087 parts of the H. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 63.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.		
625°0	619°0	617°0	616°3	616°0	617°0	617°0	616°2	619°0	619°2	619°8	619°0	619°5	
627°2	622°0	625°0	622°0	611°8	613°5	612°8	613°0	613°3	616°8	616°1	616°2	616°68	
624°0	628°0	609°8	615°0	609°1	597°2	—	—	—	—	—	—	611°94	
620°2	611°0	612°8	612°8	616°0	617°0	614°0	613°8	618°0	618°4	612°2	611°0	613°12	
628°0	627°2	628°0	629°0	630°0	628°0	620°0	622°1	621°8	619°0	618°0	618°0	618°0	
629°0	625°0	628°2	628°8	629°0	628°0	626°0	621°8	624°8	626°2	628°2	630°0	631°2	
625°0	621°0	626°0	623°8	624°8	621°2	624°0	619°1	621°8	623°0	625°1	624°8	626°09	
621°2	616°2	621°2	622°0	612°1	602°1	608°6	608°2	608°4	615°5	614°8	621°2	621°94	
616°0	605°0	606°2	607°0	606°8	610°0	—	—	—	—	—	—	619°40	
626°0	625°0	623°0	626°0	626°0	626°5	625°0	617°0	617°0	617°5	617°0	614°0	618°73	
632°0	630°0	632°0	633°5	630°1	633°5	632°0	631°2	629°4	628°2	631°8	630°2	623°74	
621°0	629°0	627°2	626°0	62°4	8	621°8	630°0	619°0	624°2	627°0	626°0	628°34	
602°2	600°0	598°8	600°0	4	8	597°0	602°0	601°0	601°0	602°0	604°9	629°72	
594°2	590°0	592°0	590°3	—	0	592°0	593°2	593°0	595°5	599°0	601°2	607°48	
595°5	595°0	595°0	598°0	595°0	595°0	604°0	603°0	606°0	606°1	607°9	612°0	595°45	
605°0	612°0	603°8	608°2	598°0	598°8	601°0	600°8	598°0	595°6	606°5	604°2	609°74	
621°0	605°5	607°0	602°2	597°2	600°0	604°0	604°8	601°5	605°0	610°0	611°0	601°95	
601°2	613°0	607°0	602°2	602°0	599°4	602°0	604°2	609°9	609°0	609°0	603°2	606°16	
628°0	615°0	591°0	595°0	601°0	595°2	598°0	586°5	591°0	602°5	607°1	610°0	609°28	
614°0	618°0	607°5	605°0	607°0	603°0	602°0	598°2	609°0	611°8	607°4	609°8	604°36	
612°0	606°0	611°0	611°0	613°0	607°0	—	—	—	—	—	—	607°30	
607°0	593°2	596°0	598°2	599°2	598°5	602°2	602°8	607°2	601°4	602°2	604°0	609°38	
601°0	601°4	606°2	605°0	605°4	605°4	606°0	605°0	605°5	606°0	607°0	603°0	601°45	
609°4	610°2	614°0	604°2	602°0	608°0	610°0	610°0	613°5	610°0	611°6	611°2	602°44	
610°0	612°0	607°5	614°0	606°9	607°0	608°0	600°0	602°0	596°0	606°0	606°2	607°55	
608°0	608°0	609°0	616°8	611°8	606°5	607°8	606°0	605°8	618°0	617°2	607°5	605°38	
608°0	608°0	609°0	616°8	611°8	606°5	607°8	606°0	605°8	618°0	617°2	607°5	608°89	
615°50	612°09	611°62	612°01	610°19	609°03	611°47	610°07	611°52	612°28	613°70	614°07	612°32	

63°5	63°6
67°2	67°4
71°3	71°2
68°4	68°2
63°9	64°2
64°2	65°2
67°0	67°4
70°4	70°8
71°0	71°0
61°2	61°6
63°0	63°7
61°8	62°6
80°2	80°4
83°0	82°2
80°3	79°5
76°5	76°5
75°4	74°5
71°8	72°4
72°3	72°0
74°0	72°6
72°3	72°5
78°7	78°7
77°0	76°5
74°6	74°3
74°8	75°3
75°3	75°2
71°62	71°63

TEMPERATURE OF THE BIFILAR MAGNET.												
61°5	61°2	63°5	63°0	62°4	61°6	61°0	60°4	60°0	59°6	59°2	58°9	61°31
67°6	67°4	67°0	66°9	66°4	66°1	66°0	65°7	65°5	65°2	65°0	64°8	61°90
70°8	70°5	70°0	69°5	69°3	68°7	—	—	—	—	—	—	68°10
68°0	67°5	66°6	66°2	66°0	65°7	66°5	66°3	66°0	65°8	65°5	65°2	66°21
61°0	63°8	63°0	62°6	62°0	61°6	61°2	60°2	6°0	59°0	58°5	58°2	61°87
65°3	65°0	64°0	63°1	62°4	61°5	60°6	60°2	59°8	59°4	59°0	58°5	61°57
67°4	66°5	66°0	65°6	65°2	64°8	64°4	64°0	63°5	63°1	62°7	62°5	61°23
70°4	70°4	69°6	69°4	69°0	68°5	68°1	68°0	67°6	67°0	66°6	66°3	67°73
71°0	71°2	71°4	71°0	70°5	69°5	—	—	—	—	—	—	67°95
61°3	63°8	63°0	62°2	61°6	60°7	61°5	63°8	63°3	62°7	62°3	61°4	61°82
63°7	61°5	62°5	62°0	61°5	61°0	60°4	60°0	59°6	59°2	58°6	58°0	60°93
63°4	63°4	63°4	63°6	62°8	62°4	62°0	61°8	61°2	60°8	60°5	60°3	60°78
80°8	80°4	79°2	78°6	78°2	77°0	76°0	75°5	75°3	74°9	74°3	74°0	74°02
83°3	82°8	81°8	80°8	80°0	79°5	78°5	77°5	77°0	76°5	76°0	75°2	79°29
79°5	78°3	78°0	77°5	77°3	77°0	—	—	—	—	—	—	77°12
76°0	75°6	75°5	75°0	74°5	74°3	74°0	73°6	73°0	72°6	72°4	72°2	74°58
74°0	73°5	72°5	72°6	72°2	71°5	70°7	70°2	70°0	69°2	69°0	68°6	72°51
72°6	72°2	71°5	71°3	70°4	69°6	69°5	69°4	68°6	68°5	68°0	67°8	70°00
71°6	71°0	70°8	70°5	70°3	70°0	69°5	69°0	68°8	68°4	68°2	68°1	69°84
72°6	71°8	71°2	70°6	70°0	69°5	69°1	68°6	68°2	67°8	67°6	67°4	70°04
72°4	71°7	70°5	70°2	69°8	69°0	—	—	—	—	—	—	70°48
78°4	77°0	76°0	75°7	75°0	74°2	73°5	73°1	72°9	72°6	72°0	71°6	74°63
76°0	75°6	75°6	75°3	75°0	74°5	74°2	73°8	73°5	73°3	73°0	73°0	74°21
74°1	73°7	73°4	72°8	72°5	72°3	71°5	71°0	70°5	70°0	69°7	69°4	72°71
75°1	74°6	74°1	74°0	73°2	72°4	72°0	71°2	71°0	70°7	69°6	69°4	72°44
75°4	75°1	74°5	74°6	74°5	74°1	73°7	73°1	73°2	72°4	71°8	71°2	73°02
71°64	71°18	70°55	70°18	69°69	69°12	68°41	67°95	67°58	67°12	66°70	66°36	68°94

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 80.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
JANUARY.	1	183'3	180'4	180'3	179'9	180'5	178'7	179'0	180'3	180'3	180'3	180'3
	2	171'0	171'0	171'6	169'9	169'8	169'1	169'6	171'3	172'3	172'3	171'7
	3	170'8	170'9	170'9	170'9	170'3	168'3	167'6	169'9	172'0	171'8	169'8
	4	—	—	—	—	—	—	—	—	—	—	—
	5	179'8	179'8	180'5	179'3	178'4	176'7	175'6	175'6	174'5	174'2	173'1
	6	175'8	176'6	175'1	174'1	172'4	170'7	170'7	171'8	172'3	171'2	172'0
	7	171'1	171'1	171'6	171'3	170'4	169'9	170'1	171'7	172'1	170'6	169'8
	8	169'6	164'3	163'5	164'2	164'9	165'4	165'4	167'8	169'2	169'2	168'5
	9	167'4	167'7	170'0	169'7	169'7	169'7	169'7	169'7	169'7	169'5	169'0
	10	171'4	172'2	170'5	170'6	170'6	169'3	169'7	167'6	170'3	170'7	170'4
	11	—	—	—	—	—	—	—	—	—	—	—
	12	178'1	175'7	178'2	178'9	178'6	178'6	178'8	17'1	178'6	179'5	179'5
	13	182'0	182'8	183'2	183'6	182'0	180'6	181'6	181'2	179'6	179'6	179'6
	14	178'2	175'5	179'4	178'8	178'3	177'6	176'4	175'2	172'4	171'2	172'8
	15	172'1	172'5	173'5	170'3	166'6	166'9	167'2	166'7	161'4	162'5	162'5
	16	161'9	164'1	161'6	161'4	162'5	164'9	165'5	165'5	167'7	169'0	170'5
	17	174'7	179'0	180'2	178'5	179'9	180'9	178'1	178'2	184'7	187'2	188'0
	18	—	—	—	—	—	—	—	—	—	—	—
	19	193'7	193'1	193'1	193'0	192'3	189'9	188'9	189'8	189'8	188'7	185'8
	20	191'1	191'1	190'0	188'9	188'9	187'1	187'1	186'6	187'7	184'7	181'3
	21	178'3	179'1	179'9	179'8	180'8	179'8	180'4	180'2	178'0	176'5	175'9
	22	181'7	180'2	183'0	182'3	182'8	181'6	182'5	188'1	187'2	186'2	184'3
	23	188'4	187'8	184'9	181'8	183'1	181'7	179'7	179'7	179'7	179'7	179'0
	24	176'8	179'4	179'2	177'3	175'8	171'8	175'8	174'7	182'3	184'3	179'6
	25	—	—	—	—	—	—	—	—	—	—	—
	26	170'6	170'6	170'6	169'0	168'6	169'1	168'6	169'2	169'1	166'1	164'7
	27	168'5	167'7	168'9	170'9	172'1	172'0	172'0	171'3	170'9	170'7	169'1
	28	169'4	169'3	169'3	167'9	170'2	168'5	166'4	166'4	168'1	168'1	167'1
	29	169'0	169'0	168'3	166'8	166'8	165'1	161'5	161'5	165'0	161'6	161'0
	30	161'7	161'1	161'1	160'5	159'8	158'2	158'2	159'8	160'1	159'9	160'3
	31	169'7	170'6	170'7	169'5	169'6	171'9	176'5	176'5	177'3	176'3	175'6
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	174'71	174'91	175'27	174'63	174'29	173'83	173'53	174'03	174'77	174'15	173'48	173'07
TEMPERATURE OF THE VERTICAL FORCE MAG.												
JANUARY.	1	40'0	40'3	40'5	40'7	40'8	41'0	41'0	—	41'2	41'6	41'8
	2	46'2	46'1	46'0	46'0	46'2	46'8	47'0	4'1	47'0	46'8	46'8
	3	47'2	47'0	47'0	46'6	46'6	46'8	47'1	47'8	47'8	48'0	48'6
	4	—	—	—	—	—	—	—	—	—	—	—
	5	42'6	42'6	42'6	42'6	42'9	43'6	44'2	44'6	45'4	45'7	45'7
	6	45'2	45'6	45'6	45'5	45'6	46'6	47'0	47'4	47'3	47'1	47'1
	7	46'6	46'6	46'6	46'7	46'8	47'6	48'0	48'0	48'2	48'7	48'8
	8	51'2	50'8	50'5	49'7	49'5	49'7	49'7	49'7	49'6	49'4	49'0
	9	49'0	48'8	48'0	47'8	48'0	48'4	48'4	48'6	48'6	48'8	49'0
	10	47'6	47'6	47'2	46'8	46'6	46'9	47'1	47'6	47'6	47'6	47'0
	11	—	—	—	—	—	—	—	—	—	—	—
	12	41'8	41'0	41'2	41'5	41'4	41'6	42'2	42'6	42'6	42'7	42'7
	13	40'0	40'0	40'0	39'4	39'4	40'0	40'6	41'0	41'6	42'4	42'8
	14	41'8	41'8	41'8	42'0	42'4	43'2	43'8	44'6	46'0	46'8	47'6
	15	45'2	45'2	46'0	45'0	46'4	47'0	47'5	47'8	48'5	49'3	49'6
	16	50'5	50'2	49'6	49'1	49'0	48'7	48'6	48'2	47'6	47'6	47'6
	17	42'0	41'6	40'6	40'2	39'8	39'6	39'4	39'6	38'8	38'8	38'4
	18	—	—	—	—	—	—	—	—	—	—	—
	19	31'6	32'1	32'2	33'0	33'8	34'0	34'5	35'5	35'9	36'3	37'6
	20	35'0	35'0	35'0	35'5	36'2	36'8	37'1	37'6	38'2	38'6	39'8
	21	41'7	41'3	41'0	40'5	40'2	40'6	40'7	41'0	41'6	42'6	42'6
	22	38'3	37'7	36'1	38'6	39'1	38'1	37'6	37'7	37'9	38'6	39'0
	23	36'0	36'3	37'0	36'7	37'3	38'7	39'8	40'0	40'5	41'0	41'7
	24	42'6	41'6	42'6	41'6	42'1	42'7	43'2	43'6	43'6	43'8	44'4
	25	—	—	—	—	—	—	—	—	—	—	—
	26	46'6	46'6	46'6	46'6	46'8	47'2	47'6	48'6	48'6	49'4	49'6
	27	47'3	46'0	46'6	45'8	45'4	45'6	45'8	46'6	46'6	47'0	46'8
	28	44'8	45'0	45'2	45'0	45'4	46'4	47'2	48'0	47'8	48'4	48'4
	29	48'8	48'8	48'9	48'6	49'0	49'6	49'7	50'3	50'3	50'3	50'4
	30	51'3	51'3	51'4	51'3	51'6	52'2	52'2	52'4	52'4	52'7	53'1
	31	47'3	46'3	45'3	45'2	43'9	43'5	43'2	43'3	43'3	43'8	44'0
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	44'01	43'83	43'86	43'63	43'79	44'19	44'47	44'83	45'00	45'33	45'57	45'71

12h.
180'3
170'8
169'5
169'0
—
172'4
171'4
170'2
170'0
169'3
171'7
—
178'8
178'2
169'5
169'5
162'0
170'9
187'7
—
185'7
181'0
171'9
182'8
188'6
178'4
—
164'9
168'7
167'6
164'0
158'9
174'9
—
172'92
—
42'8
47'6
48'6
—
46'7
47'0
48'8
48'8
49'0
46'2
—
42'6
42'6
47'5
50'5
47'2
36'6
—
38'2
39'9
41'6
42'8
43'6
—
50'0
46'6
49'0
50'0
53'5
44'6
—
45'73

1880.

10h.	11h.
180°3	180°3
171°7	170°7
169°8	169°0
—	—
173°1	173°1
172°0	172°6
169°8	169°2
168°5	169°5
169°0	169°3
170°4	170°4
—	—
179°5	179°2
179°6	179°6
172°8	171°3
162°5	161°4
170°5	169°6
188°0	187°7
—	—
185°8	184°4
181°7	181°3
176°5	175°9
181°4	183°7
179°0	176°7
179°6	178°4
—	—
161°7	161°5
169°1	168°5
167°1	168°4
163°0	161°0
159°9	160°3
175°6	173°9
—	—
173°48	173°07

VERTICAL FORCE.

One Scale Division = 000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 80.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
170°8	167°5	165°4	177°6	176°6	177°5	177°5	176°0	176°0	173°4	173°4	173°2	177°03
169°5	169°5	169°5	169°5	168°4	168°4	168°4	168°4	171°1	172°3	172°3	172°3	170°48
169°0	169°9	170°7	172°2	169°9	171°0	—	—	—	—	—	—	172°63
—	—	—	—	—	—	179°6	179°6	179°4	179°9	179°9	179°8	179°8
172°4	173°5	173°7	173°6	172°5	172°5	172°5	173°7	174°9	175°2	175°2	175°2	175°23
171°4	173°0	175°1	175°6	175°1	175°3	175°3	168°5	174°3	174°4	172°7	172°7	173°28
170°2	170°3	169°8	169°8	167°5	167°8	166°7	164°8	164°8	157°1	155°1	162°4	168°13
170°0	169°5	169°5	169°2	169°2	169°8	169°8	169°8	168°8	168°8	167°0	167°2	167°55
169°3	169°3	169°3	170°6	170°6	170°6	170°1	169°2	169°5	169°7	169°6	170°5	169°56
171°7	172°4	172°4	172°5	173°4	172°4	—	—	—	—	—	—	172°90
—	—	—	—	—	—	180°3	176°7	181°1	176°0	180°2	177°7	179°25
178°8	178°8	179°6	179°6	180°0	179°8	180°0	180°0	180°4	180°4	180°4	181°0	180°66
178°2	180°3	183°2	186°6	183°1	179°5	179°5	179°5	179°5	179°5	178°6	177°8	177°8
169°5	169°8	171°7	171°3	170°5	170°5	170°5	170°0	171°3	166°7	166°0	171°6	172°77
162°0	162°0	162°5	162°4	163°4	162°7	162°7	161°4	162°7	162°7	161°9	161°9	161°91
170°9	170°9	170°9	172°0	170°5	170°5	171°8	170°4	163°3	163°5	168°6	174°7	167°84
187°7	186°2	186°2	185°8	183°2	183°2	—	—	—	—	—	—	185°77
—	—	—	—	—	—	195°5	196°6	196°3	193°5	193°5	193°8	189°61
185°7	186°8	188°8	188°8	189°3	190°5	189°3	189°3	190°2	190°0	189°9	189°6	189°61
181°0	180°5	179°3	179°3	178°2	178°6	177°8	178°6	174°6	178°2	178°2	177°6	182°84
171°9	170°1	173°2	171°9	172°9	174°2	174°5	175°5	178°0	179°1	180°2	180°5	177°11
182°8	183°2	184°7	183°7	183°7	185°7	185°7	186°4	186°8	188°2	188°2	189°6	181°81
188°6	180°8	180°8	180°3	181°7	181°4	182°3	178°4	165°9	176°9	168°2	172°3	180°12
178°4	176°5	174°9	173°4	173°2	172°8	—	—	—	—	—	—	175°56
—	—	—	—	—	—	172°9	172°9	171°1	170°8	170°6	170°6	167°47
161°9	164°9	166°0	166°2	166°2	165°5	165°5	167°3	167°3	167°9	167°9	169°1	167°47
168°7	169°2	170°2	170°2	169°4	170°0	170°3	171°1	171°0	171°2	168°4	170°8	170°13
167°6	169°4	167°9	179°2	170°3	171°9	172°2	170°5	172°1	172°1	168°7	170°9	169°59
164°0	164°5	164°9	163°9	165°1	160°5	163°1	161°6	159°7	160°5	160°5	160°8	161°12
163°0	159°0	159°0	169°0	159°3	160°4	157°4	157°1	157°1	160°2	162°5	167°7	159°94
159°9	173°9	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	191°6	191°4	191°4	190°0	189°2	186°9	178°15
—	—	—	—	—	—	—	—	—	—	—	—	—
172°92	172°71	173°13	174°07	173°30	173°40	171°92	174°42	174°02	174°01	173°59	174°75	173°99

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

41°8	42°0
46°8	47°6
48°6	48°4
—	—
45°7	46°4
47°1	47°1
48°8	49°0
49°4	49°0
49°0	48°6
47°6	47°0
—	—
42°7	42°8
42°4	42°8
47°6	47°3
49°6	50°2
47°6	47°6
38°4	37°8
—	—
37°6	38°6
39°8	39°9
42°6	42°8
39°0	39°7
41°7	42°2
41°4	43°8
—	—
49°6	50°0
46°8	46°8
48°4	48°7
50°3	50°4
53°1	53°2
44°0	44°6
—	—
45°57	45°71

42°8	42°6	42°6	43°0	43°0	43°1	43°6	43°1	43°5	44°0	44°6	45°4	42°22
47°6	48°2	47°8	47°6	48°2	48°1	48°1	47°6	47°2	46°8	46°6	47°0	47°12
48°6	48°4	48°6	48°4	48°4	48°5	—	—	—	—	—	—	46°41
—	—	—	—	—	—	42°0	42°0	42°2	42°4	42°4	42°8	45°15
46°7	46°8	46°7	46°9	46°8	46°8	46°7	46°4	45°6	45°2	45°0	45°2	46°42
47°0	47°0	46°6	46°6	46°4	46°0	45°8	46°1	46°2	46°4	46°6	46°4	48°87
48°8	49°2	49°5	49°8	50°1	50°3	50°6	50°1	50°2	50°7	50°9	51°0	49°38
48°8	49°0	49°0	49°2	48°8	48°6	48°6	48°7	49°0	49°2	49°1	49°0	48°45
49°0	48°6	48°2	48°4	48°4	48°4	48°4	48°4	48°3	48°5	48°3	48°0	45°37
46°2	46°4	46°0	46°0	46°0	45°8	—	—	—	—	—	—	41°84
—	—	—	—	—	—	40°8	40°8	40°8	40°8	41°2	40°8	40°2
42°6	42°6	42°4	42°2	42°2	42°0	42°0	41°1	41°1	41°0	40°6	40°2	41°62
42°6	42°8	43°2	42°6	42°0	42°0	42°2	42°4	42°4	42°4	42°4	42°4	45°46
47°5	46°8	47°0	47°5	47°6	47°6	47°2	47°0	46°4	46°2	46°0	45°2	48°91
50°5	50°6	50°6	50°6	50°5	50°4	50°3	50°3	50°7	50°9	51°0	50°5	46°87
47°2	47°0	46°8	45°7	45°6	45°2	44°9	44°2	43°8	43°6	42°6	42°5	37°00
36°6	37°6	36°9	36°9	37°0	37°0	—	—	—	—	—	—	35°43
—	—	—	—	—	—	30°9	30°9	31°3	31°8	31°9	31°7	39°12
38°2	37°4	36°8	36°9	36°3	36°3	35°9	35°9	35°6	35°4	35°5	35°1	41°84
39°9	40°5	40°8	41°1	41°0	41°4	41°6	41°5	41°5	41°6	41°6	41°6	37°93
44°6	45°6	44°6	44°8	44°1	42°8	41°8	41°2	50°2	39°7	39°3	38°8	41°84
39°4	39°0	38°7	38°2	38°0	37°7	37°3	36°6	36°1	36°0	35°8	35°8	37°93
42°8	42°6	42°4	41°8	41°2	40°8	40°6	40°5	40°8	41°2	41°6	41°8	40°02
43°6	43°6	44°2	45°0	45°2	45°4	—	—	—	—	—	—	44°15
—	—	—	—	—	—	45°7	45°5	46°1	46°4	46°7	46°5	48°39
50°0	49°5	49°6	49°1	48°8	49°4	49°5	48°7	48°6	48°4	48°0	47°5	46°17
46°6	46°1	46°2	45°7	46°5	46°5	46°2	45°8	45°8	45°7	45°6	45°2	47°84
49°0	49°5	49°5	49°2	49°3	49°3	49°2	48°8	48°2	47°8	48°8	49°3	50°14
50°0	50°0	49°8	50°4	50°4	50°4	50°5	51°0	51°3	51°3	51°6	51°6	52°02
53°5	53°4	53°4	53°7	53°7	52°9	52°3	51°3	50°7	50°5	49°5	48°4	47°84
44°6	44°4	44°0	43°5	43°5	43°4	—	—	—	—	—	—	41°64
—	—	—	—	—	—	32°6	33°0	33°5	34°0	34°2	35°0	—
45°73	45°75	45°63	45°59	45°52	45°43	41°27	41°03	43°98	44°00	43°98	43°88	44°67

VERTICAL FORCE.												
One Scale Division = 0.00065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 80.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
FEBRUARY.												
2	181.8	187.3	188.3	188.5	188.5	188.8	188.1	187.2	186.0	186.2	184.0	183.1
3	177.2	177.2	176.7	173.7	173.3	172.7	171.8	170.6	170.3	169.5	168.3	167.6
4	171.6	172.7	170.8	167.3	166.2	164.9	165.9	167.3	168.1	170.3	169.7	169.7
5	167.0	167.0	167.3	164.7	162.5	163.3	164.2	163.9	163.9	162.5	162.5	164.0
6	166.1	166.8	167.5	164.5	163.5	162.1	163.2	163.7	163.7	162.8	161.7	162.7
7	165.9	166.8	169.4	166.3	161.5	163.7	164.2	161.6	164.1	164.6	165.6	165.6
8	—	—	—	—	—	—	—	—	—	—	—	—
9	188.6	189.8	190.0	184.0	189.6	189.6	190.5	190.4	191.1	190.6	189.9	190.6
10	194.1	195.0	194.6	193.4	191.5	190.8	191.5	190.2	188.4	187.1	186.7	186.7
11	180.7	179.7	179.9	179.9	180.2	178.4	177.8	177.1	177.1	178.7	176.8	175.9
12	181.1	182.8	185.0	181.9	181.7	181.7	181.3	179.6	179.6	178.5	177.3	178.6
13	175.5	175.7	174.8	177.1	175.2	174.5	173.2	172.3	171.0	170.0	169.5	169.5
14	171.0	171.6	173.9	174.0	173.0	171.4	171.4	169.8	170.2	169.9	169.2	171.0
15	—	—	—	—	—	—	—	—	—	—	—	—
16	169.3	166.0	173.4	172.4	171.6	171.7	173.8	173.6	177.2	178.3	176.2	176.4
17	175.3	175.2	174.5	173.9	172.4	169.5	169.2	168.5	170.0	170.1	170.6	170.6
18	173.0	176.0	175.3	171.9	169.4	169.4	169.4	171.0	170.3	170.6	171.3	170.3
19	176.6	178.6	180.0	179.1	177.6	176.0	176.0	176.3	176.7	176.8	177.5	178.0
20	180.8	181.4	178.7	178.9	176.2	175.6	175.6	175.3	175.3	176.6	170.5	170.5
21	170.6	170.5	169.8	168.4	167.8	166.5	166.1	165.8	166.4	166.9	167.8	169.0
22	—	—	—	—	—	—	—	—	—	—	—	—
23	183.7	184.5	184.3	177.7	178.6	178.6	177.1	177.6	178.3	177.0	178.3	178.4
24	180.3	182.2	182.2	181.9	180.4	180.4	178.8	176.2	176.2	176.0	175.6	177.0
25	182.0	183.9	183.9	182.7	181.0	181.0	179.9	179.9	180.0	181.0	181.0	182.9
26	186.8	189.8	193.6	175.9	185.5	184.8	185.7	185.7	185.7	188.8	188.8	189.7
27	198.8	198.9	199.5	192.9	191.3	192.0	189.9	186.0	186.0	185.9	185.9	185.2
28	183.0	184.7	185.2	185.6	185.2	184.7	183.7	183.3	182.4	182.7	182.3	180.3
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	178.49	179.34	179.94	177.36	177.07	176.34	176.18	175.54	175.80	175.68	175.29	175.55
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
FEBRUARY.												
2	35.6	35.4	35.0	35.0	35.6	36.2	37.0	37.9	38.5	39.0	39.8	39.8
3	42.6	42.8	43.2	43.9	44.0	44.5	45.2	45.1	45.9	46.7	47.6	47.8
4	46.6	46.6	49.0	47.5	48.4	48.6	48.6	48.6	48.6	48.8	49.6	48.0
5	48.6	48.4	48.8	49.4	50.3	50.4	50.4	50.6	50.6	51.0	51.0	50.7
6	49.4	49.1	48.6	48.7	48.9	49.3	49.5	50.0	50.5	51.0	51.3	51.3
7	49.0	48.6	48.8	48.4	49.0	49.8	50.1	50.3	50.0	49.7	49.9	49.6
8	—	—	—	—	—	—	—	—	—	—	—	—
9	33.8	33.8	34.2	34.4	35.2	35.0	34.9	34.5	34.7	35.1	35.4	36.1
10	33.8	33.6	33.6	33.6	33.7	34.0	34.8	35.6	36.5	37.2	37.6	37.4
11	40.2	41.4	41.0	41.1	41.1	41.9	42.6	43.0	43.0	42.8	43.2	43.4
12	40.0	39.5	40.0	40.0	40.2	40.4	40.8	41.3	41.6	42.6	42.6	42.5
13	43.3	43.4	43.4	43.4	43.5	44.0	45.0	45.6	46.1	47.0	47.6	47.6
14	46.8	45.4	44.8	43.5	43.6	44.3	44.6	45.6	46.0	46.9	47.0	46.7
15	—	—	—	—	—	—	—	—	—	—	—	—
16	42.0	42.3	42.3	42.2	43.6	44.0	44.4	44.6	44.6	44.6	44.8	44.6
17	43.8	43.6	43.4	43.9	44.4	45.5	46.2	46.6	46.6	47.0	47.4	47.0
18	44.7	43.9	44.7	44.8	45.4	45.8	46.6	46.8	47.0	47.4	47.6	47.8
19	42.4	41.8	41.3	41.2	41.6	41.8	42.6	43.0	43.0	43.0	42.9	42.4
20	41.4	41.6	41.3	41.5	41.5	42.1	42.7	42.8	43.4	44.6	45.0	45.7
21	46.8	46.6	46.6	46.6	46.8	48.0	48.5	48.8	48.5	48.2	48.4	47.8
22	—	—	—	—	—	—	—	—	—	—	—	—
23	38.2	37.8	37.6	40.6	39.6	39.8	40.4	40.6	40.6	41.0	41.4	41.2
24	39.4	39.2	39.4	38.8	38.9	39.4	40.7	41.5	42.2	42.6	42.6	42.2
25	39.8	38.8	38.8	38.6	39.0	39.2	39.8	40.5	40.6	41.0	41.5	41.1
26	37.2	36.3	36.8	44.0	37.9	37.8	38.0	38.0	38.0	38.1	38.0	37.3
27	34.2	30.5	31.0	34.1	32.1	33.1	34.6	36.5	37.6	38.2	38.3	38.1
28	40.0	39.5	38.4	38.3	38.5	39.4	40.0	40.0	40.1	40.6	40.8	41.0
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41.53	41.25	41.33	41.81	41.78	42.26	42.83	43.24	43.51	43.92	44.18	44.05

12h.
183.1
168.0
169.7
163.7
161.2
165.9
—
191.3
186.2
177.0
179.9
169.5
173.9
—
178.5
171.5
170.3
170.3
180.3
171.3
169.4
—
178.3
177.3
192.4
189.7
185.0
181.9
—
176.60
—
39.8
47.8
47.8
50.4
50.9
49.4
—
33.6
37.4
43.0
42.2
47.6
46.6
—
44.4
46.8
47.6
41.7
46.1
47.6
—
41.0
40.7
40.7
37.0
38.3
41.0
—
43.85

ure, 1°80.

10h.	11h.
184°0	183°1
168°3	167°6
169°7	169°7
162°5	164°0
161°7	162°7
165°6	165°6
—	—
189°9	190°6
186°7	186°7
176°8	175°9
177°3	178°6
169°5	169°5
169°2	171°0
—	—
176°2	176°4
170°6	170°6
171°3	170°3
177°5	178°0
170°5	170°5
167°8	169°0
—	—
178°3	178°4
175°6	177°0
181°0	182°9
188°8	189°7
185°9	185°2
182°3	180°3
—	—
175°29	175°55

VERTICAL FORCE.  
One Scale Division = 0.00065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°80.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
184°0	183°1	182°4	182°3	181°0	179°6	179°6	177°8	177°7	176°3	175°8	174°8	183°10
168°3	167°6	167°6	166°7	167°6	167°6	167°6	168°8	168°8	168°0	167°7	168°8	170°15
169°7	169°1	169°6	169°1	168°5	169°4	169°4	170°3	170°1	170°1	170°0	163°2	168°87
162°5	164°0	164°0	164°8	163°8	163°8	164°1	163°8	163°8	163°8	161°2	165°3	164°25
161°7	163°9	163°9	163°9	165°2	165°1	164°6	164°6	165°7	166°2	161°8	161°1	164°23
165°6	165°9	166°9	169°5	170°9	171°3	—	—	—	—	—	—	—
—	—	—	—	—	—	179°6	180°3	180°8	181°4	181°4	186°3	170°35
189°9	192°5	191°4	191°3	191°3	191°6	192°9	192°8	192°8	192°8	194°8	193°1	190°97
186°7	186°2	184°4	184°7	185°8	186°2	184°5	184°0	183°1	181°9	181°0	181°0	187°46
176°8	179°0	179°5	181°7	181°1	180°9	180°7	180°7	180°7	180°4	179°6	180°6	179°34
177°3	181°3	181°3	181°3	181°3	181°3	178°4	179°9	179°2	178°9	176°3	175°4	180°15
169°5	171°6	170°0	167°9	172°2	171°4	169°7	170°7	170°6	170°8	168°3	170°9	171°75
169°2	173°9	174°8	172°8	173°7	173°1	—	—	—	—	—	—	—
—	—	—	—	—	—	172°5	167°1	171°3	177°5	178°0	174°4	172°39
176°2	178°5	178°4	176°3	176°1	177°8	175°8	174°7	175°5	175°2	174°8	175°3	171°75
170°6	171°5	172°4	172°4	172°2	172°2	170°3	170°5	170°5	172°9	172°9	173°0	171°75
171°3	170°3	170°2	171°0	170°5	170°5	171°0	172°6	172°6	172°6	175°3	176°9	172°08
177°5	180°3	179°6	179°6	182°9	182°9	182°9	181°2	179°3	179°3	179°2	179°3	178°96
170°5	171°3	170°0	171°7	171°3	171°3	167°7	169°8	170°2	170°2	170°2	170°7	173°23
167°8	169°4	168°7	168°7	168°8	170°8	—	—	—	—	—	—	—
—	—	—	—	—	—	179°0	171°7	177°4	176°4	182°8	183°7	171°12
178°3	178°3	178°3	179°6	179°6	179°3	180°5	180°0	180°0	180°3	180°3	180°3	179°51
175°6	177°3	179°4	179°4	179°0	179°5	179°5	180°3	180°3	181°3	182°0	181°6	179°46
181°0	192°4	192°4	198°2	193°1	186°5	181°6	181°0	181°9	182°1	181°3	182°6	181°37
188°8	189°7	189°7	190°3	190°9	190°0	187°6	188°0	189°1	189°8	191°4	191°6	188°55
185°9	185°2	185°0	182°7	180°5	179°7	181°4	180°5	180°3	179°4	179°7	181°5	186°18
182°3	180°3	181°8	181°8	180°9	181°5	181°5	—	—	—	—	—	—
—	—	—	—	—	—	193°6	191°2	191°2	190°5	190°5	193°8	185°11
—	—	—	—	—	—	—	—	—	—	—	—	—
175°29	175°55	—	—	—	—	—	—	—	—	—	—	—
176°60	176°76	176°75	176°81	176°91	176°50	177°37	176°85	177°19	177°83	177°80	178°14	177°00

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

39°8	40°0	40°1	40°5	40°6	41°4	41°4	41°6	42°2	42°0	42°4	42°4	39°13	
47°8	48°0	48°0	47°8	47°8	47°8	47°4	47°4	47°0	46°6	46°8	46°6	46°18	
47°6	48°0	—	—	—	—	—	—	—	—	—	—	—	
47°8	47°8	47°6	47°6	47°6	47°6	47°4	47°2	47°3	47°5	47°5	47°6	47°85	
50°4	50°4	50°3	50°3	50°5	50°5	50°8	50°3	50°2	50°5	50°3	49°7	50°19	
50°9	50°9	50°7	50°3	50°3	50°3	50°3	50°3	50°0	49°7	49°5	49°2	50°00	
49°4	49°4	49°0	48°3	47°5	46°6	—	—	—	—	—	—	—	
—	—	—	—	—	—	33°5	34°0	34°2	34°6	35°0	33°0	45°32	
35°4	36°1	—	—	—	—	—	—	—	—	—	—	—	
37°6	37°4	35°6	35°3	35°2	35°0	34°7	34°2	33°8	34°0	34°0	34°0	34°71	
43°2	43°4	37°4	38°2	38°0	38°0	38°4	39°4	40°0	40°3	40°6	40°6	36°98	
42°6	42°5	42°5	41°6	41°1	40°9	41°2	41°1	40°9	40°9	40°9	40°1	41°67	
47°6	47°6	42°2	41°7	41°5	41°6	41°6	42°0	42°3	42°5	42°7	43°1	41°60	
47°0	46°7	47°7	48°2	47°6	47°7	47°6	47°8	47°4	47°4	47°0	46°7	46°25	
—	46°6	46°5	45°9	45°8	45°6	—	—	—	—	—	—	—	
—	—	—	—	—	—	40°0	40°2	40°4	41°0	41°4	41°6	41°40	
41°8	41°6	41°4	41°2	43°8	43°6	43°1	43°2	43°3	43°5	43°6	43°6	43°70	
47°4	47°0	46°8	46°2	45°8	45°9	45°7	45°6	45°2	45°0	45°2	45°5	45°58	
47°6	47°8	47°6	47°6	46°8	46°6	46°6	46°0	45°3	44°5	43°6	43°1	42°33	
42°9	42°4	41°7	41°6	41°4	41°5	41°2	41°2	41°4	41°3	41°4	41°8	41°87	
45°0	43°7	46°1	47°0	47°1	47°0	46°8	47°0	47°6	47°4	47°5	47°4	44°97	
48°4	47°8	47°6	47°4	47°2	47°0	47°0	—	—	—	—	—	—	
—	—	—	—	—	—	—	37°8	38°7	38°8	38°9	38°2	38°4	45°27
41°4	41°2	41°0	41°0	41°2	40°8	40°8	40°6	40°0	39°9	39°9	39°8	39°4	40°17
42°6	42°2	41°7	41°6	41°0	40°6	40°3	40°3	40°4	40°0	40°0	40°0	40°2	40°61
41°5	41°1	40°7	40°4	40°0	40°0	40°0	39°6	39°6	38°7	38°3	38°3	37°6	39°73
38°0	37°3	37°0	36°8	36°2	36°0	35°3	34°6	34°1	33°6	32°2	32°0	31°6	36°26
38°3	38°1	38°3	39°0	40°0	40°0	40°0	40°2	40°3	40°1	40°0	40°0	40°0	37°23
40°8	41°0	41°0	41°0	41°0	40°9	40°6	—	—	—	—	—	—	—
—	—	—	—	—	—	—	34°6	34°2	34°2	33°9	33°6	33°6	38°59
—	—	—	—	—	—	—	—	—	—	—	—	—	—
41°18	44°05	—	—	—	—	—	—	—	—	—	—	—	—
43°85	43°92	43°77	43°57	43°42	43°35	41°95	41°87	41°81	41°71	41°72	41°48	42°67	

VERTICAL FORCE.													12 <sup>h</sup> .
One Scale Division = '00003 parts of the V. F. Increase in Scale Divisions, corresponding to 1° decrease of Temperature, 1°80.													
Mean (contin- gen Times.)	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
2	193 <sup>8</sup>	193 <sup>6</sup>	191 <sup>0</sup>	186 <sup>7</sup>	183 <sup>9</sup>	181 <sup>0</sup>	181 <sup>0</sup>	180 <sup>0</sup>	179 <sup>4</sup>	179 <sup>4</sup>	179 <sup>6</sup>	178 <sup>2</sup>	178 <sup>2</sup>
3	182 <sup>2</sup>	183 <sup>5</sup>	182 <sup>2</sup>	180 <sup>6</sup>	176 <sup>2</sup>	173 <sup>5</sup>	172 <sup>1</sup>	171 <sup>5</sup>	170 <sup>3</sup>	170 <sup>9</sup>	171 <sup>4</sup>	170 <sup>0</sup>	170 <sup>4</sup>
4	174 <sup>8</sup>	173 <sup>7</sup>	173 <sup>4</sup>	170 <sup>7</sup>	167 <sup>0</sup>	165 <sup>5</sup>	165 <sup>4</sup>	165 <sup>3</sup>	165 <sup>8</sup>	164 <sup>7</sup>	164 <sup>1</sup>	165 <sup>9</sup>	165 <sup>9</sup>
5	166 <sup>6</sup>	166 <sup>6</sup>	165 <sup>0</sup>	163 <sup>3</sup>	161 <sup>9</sup>	158 <sup>8</sup>	157 <sup>5</sup>	158 <sup>5</sup>	160 <sup>1</sup>	159 <sup>7</sup>	157 <sup>9</sup>	157 <sup>6</sup>	157 <sup>3</sup>
6	165 <sup>6</sup>	165 <sup>4</sup>	165 <sup>4</sup>	163 <sup>1</sup>	162 <sup>6</sup>	163 <sup>7</sup>	163 <sup>3</sup>	163 <sup>0</sup>	162 <sup>7</sup>	162 <sup>2</sup>	162 <sup>3</sup>	161 <sup>5</sup>	163 <sup>3</sup>
7	172 <sup>6</sup>	173 <sup>6</sup>	173 <sup>1</sup>	171 <sup>2</sup>	168 <sup>6</sup>	167 <sup>7</sup>	167 <sup>7</sup>	166 <sup>8</sup>	168 <sup>8</sup>	169 <sup>5</sup>	169 <sup>5</sup>	170 <sup>6</sup>	169 <sup>9</sup>
8	—	—	—	—	—	—	—	—	—	—	—	—	—
9	167 <sup>0</sup>	167 <sup>3</sup>	168 <sup>0</sup>	166 <sup>8</sup>	162 <sup>6</sup>	159 <sup>8</sup>	160 <sup>4</sup>	161 <sup>1</sup>	160 <sup>6</sup>	160 <sup>0</sup>	160 <sup>0</sup>	159 <sup>5</sup>	158 <sup>1</sup>
10	159 <sup>3</sup>	162 <sup>9</sup>	162 <sup>9</sup>	161 <sup>8</sup>	158 <sup>5</sup>	156 <sup>5</sup>	157 <sup>1</sup>	157 <sup>1</sup>	157 <sup>7</sup>	157 <sup>9</sup>	157 <sup>9</sup>	157 <sup>8</sup>	157 <sup>8</sup>
11	166 <sup>2</sup>	166 <sup>3</sup>	163 <sup>4</sup>	163 <sup>8</sup>	156 <sup>7</sup>	153 <sup>9</sup>	153 <sup>2</sup>	154 <sup>3</sup>	156 <sup>1</sup>	157 <sup>0</sup>	155 <sup>7</sup>	154 <sup>7</sup>	155 <sup>4</sup>
12	161 <sup>3</sup>	160 <sup>0</sup>	159 <sup>9</sup>	158 <sup>8</sup>	157 <sup>7</sup>	157 <sup>7</sup>	157 <sup>1</sup>	157 <sup>5</sup>	157 <sup>5</sup>	157 <sup>5</sup>	158 <sup>9</sup>	158 <sup>0</sup>	159 <sup>8</sup>
13	155 <sup>1</sup>	159 <sup>2</sup>	146 <sup>7</sup>	148 <sup>4</sup>	148 <sup>6</sup>	149 <sup>8</sup>	151 <sup>3</sup>	157 <sup>0</sup>	158 <sup>2</sup>	158 <sup>8</sup>	162 <sup>1</sup>	168 <sup>7</sup>	161 <sup>9</sup>
14	150 <sup>2</sup>	150 <sup>7</sup>	156 <sup>9</sup>	153 <sup>8</sup>	159 <sup>3</sup>	158 <sup>9</sup>	158 <sup>7</sup>	169 <sup>8</sup>	161 <sup>5</sup>	161 <sup>1</sup>	163 <sup>7</sup>	163 <sup>7</sup>	163 <sup>4</sup>
15	—	—	—	—	—	—	—	—	—	—	—	—	—
16	169 <sup>9</sup>	171 <sup>5</sup>	168 <sup>4</sup>	167 <sup>7</sup>	168 <sup>4</sup>	168 <sup>1</sup>	168 <sup>1</sup>	168 <sup>8</sup>	171 <sup>9</sup>	179 <sup>7</sup>	179 <sup>5</sup>	179 <sup>9</sup>	183 <sup>2</sup>
17	168 <sup>8</sup>	159 <sup>6</sup>	162 <sup>3</sup>	167 <sup>2</sup>	169 <sup>8</sup>	170 <sup>7</sup>	172 <sup>2</sup>	169 <sup>6</sup>	171 <sup>7</sup>	173 <sup>5</sup>	174 <sup>4</sup>	167 <sup>5</sup>	166 <sup>3</sup>
18	169 <sup>3</sup>	170 <sup>9</sup>	170 <sup>9</sup>	173 <sup>3</sup>	170 <sup>5</sup>	167 <sup>4</sup>	167 <sup>4</sup>	167 <sup>9</sup>	166 <sup>6</sup>	165 <sup>1</sup>	163 <sup>4</sup>	164 <sup>4</sup>	161 <sup>7</sup>
19	156 <sup>7</sup>	155 <sup>5</sup>	159 <sup>7</sup>	159 <sup>3</sup>	158 <sup>6</sup>	159 <sup>3</sup>	155 <sup>0</sup>	154 <sup>9</sup>	153 <sup>9</sup>	154 <sup>3</sup>	155 <sup>4</sup>	156 <sup>6</sup>	159 <sup>3</sup>
20	159 <sup>7</sup>	159 <sup>1</sup>	159 <sup>1</sup>	156 <sup>4</sup>	154 <sup>5</sup>	153 <sup>4</sup>	153 <sup>4</sup>	151 <sup>1</sup>	155 <sup>1</sup>	155 <sup>1</sup>	155 <sup>3</sup>	156 <sup>0</sup>	156 <sup>0</sup>
21	160 <sup>2</sup>	160 <sup>2</sup>	162 <sup>1</sup>	161 <sup>6</sup>	162 <sup>3</sup>	161 <sup>8</sup>	161 <sup>8</sup>	161 <sup>8</sup>	163 <sup>7</sup>	164 <sup>0</sup>	162 <sup>5</sup>	162 <sup>5</sup>	162 <sup>0</sup>
22	—	—	—	—	—	—	—	—	—	—	—	—	—
23	169 <sup>9</sup>	169 <sup>9</sup>	168 <sup>0</sup>	161 <sup>2</sup>	166 <sup>9</sup>	159 <sup>0</sup>	158 <sup>1</sup>	157 <sup>1</sup>	158 <sup>3</sup>	158 <sup>9</sup>	159 <sup>3</sup>	159 <sup>3</sup>	159 <sup>7</sup>
24	158 <sup>1</sup>	159 <sup>2</sup>	160 <sup>3</sup>	159 <sup>5</sup>	158 <sup>5</sup>	159 <sup>7</sup>	160 <sup>0</sup>	159 <sup>7</sup>	160 <sup>6</sup>	161 <sup>2</sup>	160 <sup>1</sup>	161 <sup>5</sup>	160 <sup>9</sup>
25 <sup>b</sup>	162 <sup>4</sup>	162 <sup>4</sup>	162 <sup>4</sup>	160 <sup>8</sup>	159 <sup>2</sup>	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	166 <sup>32</sup>	165 <sup>98</sup>	165 <sup>91</sup>	161 <sup>91</sup>	163 <sup>70</sup>	162 <sup>17</sup>	162 <sup>01</sup>	162 <sup>34</sup>	163 <sup>18</sup>	163 <sup>52</sup>	163 <sup>65</sup>	163 <sup>69</sup>	163 <sup>53</sup>

TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
2	31 <sup>0</sup>	31 <sup>2</sup>	35 <sup>0</sup>	36 <sup>6</sup>	38 <sup>2</sup>	38 <sup>7</sup>	40 <sup>0</sup>	40 <sup>6</sup>	41 <sup>0</sup>	41 <sup>6</sup>	41 <sup>8</sup>	42 <sup>0</sup>	41 <sup>9</sup>
3	40 <sup>2</sup>	39 <sup>8</sup>	40 <sup>0</sup>	40 <sup>8</sup>	42 <sup>0</sup>	43 <sup>4</sup>	41 <sup>0</sup>	41 <sup>6</sup>	45 <sup>2</sup>	45 <sup>7</sup>	46 <sup>2</sup>	45 <sup>8</sup>	46 <sup>0</sup>
4	41 <sup>6</sup>	41 <sup>0</sup>	41 <sup>6</sup>	45 <sup>6</sup>	47 <sup>3</sup>	48 <sup>1</sup>	48 <sup>2</sup>	48 <sup>0</sup>	48 <sup>1</sup>	48 <sup>8</sup>	49 <sup>2</sup>	49 <sup>1</sup>	49 <sup>1</sup>
5	48 <sup>8</sup>	48 <sup>1</sup>	49 <sup>2</sup>	49 <sup>2</sup>	49 <sup>6</sup>	50 <sup>3</sup>	50 <sup>6</sup>	51 <sup>3</sup>	51 <sup>3</sup>	51 <sup>9</sup>	53 <sup>2</sup>	53 <sup>3</sup>	53 <sup>5</sup>
6	49 <sup>7</sup>	49 <sup>3</sup>	49 <sup>2</sup>	49 <sup>5</sup>	49 <sup>5</sup>	49 <sup>1</sup>	49 <sup>6</sup>	49 <sup>7</sup>	49 <sup>9</sup>	50 <sup>5</sup>	50 <sup>8</sup>	50 <sup>5</sup>	50 <sup>2</sup>
7	44 <sup>7</sup>	44 <sup>5</sup>	44 <sup>6</sup>	44 <sup>9</sup>	46 <sup>0</sup>	46 <sup>7</sup>	46 <sup>7</sup>	46 <sup>7</sup>	46 <sup>7</sup>	46 <sup>8</sup>	46 <sup>8</sup>	46 <sup>6</sup>	46 <sup>6</sup>
8	—	—	—	—	—	—	—	—	—	—	—	—	—
9	47 <sup>5</sup>	47 <sup>4</sup>	47 <sup>3</sup>	47 <sup>6</sup>	48 <sup>8</sup>	50 <sup>0</sup>	50 <sup>0</sup>	50 <sup>6</sup>	51 <sup>0</sup>	51 <sup>6</sup>	51 <sup>9</sup>	52 <sup>0</sup>	51 <sup>7</sup>
10	50 <sup>6</sup>	49 <sup>4</sup>	49 <sup>6</sup>	50 <sup>3</sup>	51 <sup>5</sup>	52 <sup>3</sup>	52 <sup>6</sup>	52 <sup>4</sup>	52 <sup>4</sup>	52 <sup>7</sup>	53 <sup>1</sup>	53 <sup>3</sup>	53 <sup>6</sup>
11	49 <sup>0</sup>	48 <sup>6</sup>	49 <sup>7</sup>	50 <sup>0</sup>	51 <sup>7</sup>	52 <sup>2</sup>	53 <sup>2</sup>	53 <sup>7</sup>	53 <sup>7</sup>	53 <sup>9</sup>	54 <sup>4</sup>	54 <sup>5</sup>	54 <sup>5</sup>
12	51 <sup>5</sup>	51 <sup>6</sup>	51 <sup>5</sup>	51 <sup>8</sup>	52 <sup>6</sup>	52 <sup>8</sup>	53 <sup>0</sup>	53 <sup>1</sup>	53 <sup>5</sup>	53 <sup>6</sup>	53 <sup>5</sup>	53 <sup>7</sup>	53 <sup>3</sup>
13	54 <sup>6</sup>	54 <sup>6</sup>	54 <sup>4</sup>	54 <sup>0</sup>	54 <sup>0</sup>	54 <sup>3</sup>	54 <sup>6</sup>	55 <sup>2</sup>	55 <sup>2</sup>	55 <sup>0</sup>	54 <sup>6</sup>	55 <sup>3</sup>	55 <sup>3</sup>
14	51 <sup>9</sup>	51 <sup>5</sup>	51 <sup>1</sup>	51 <sup>3</sup>	51 <sup>3</sup>	51 <sup>5</sup>	54 <sup>5</sup>	54 <sup>7</sup>	54 <sup>7</sup>	55 <sup>1</sup>	54 <sup>8</sup>	54 <sup>3</sup>	54 <sup>1</sup>
15	—	—	—	—	—	—	—	—	—	—	—	—	—
16	46 <sup>8</sup>	46 <sup>8</sup>	47 <sup>2</sup>	46 <sup>7</sup>	46 <sup>8</sup>	46 <sup>7</sup>	46 <sup>9</sup>	47 <sup>0</sup>	47 <sup>4</sup>	47 <sup>6</sup>	47 <sup>6</sup>	47 <sup>6</sup>	47 <sup>5</sup>
17	45 <sup>4</sup>	44 <sup>3</sup>	44 <sup>1</sup>	43 <sup>7</sup>	43 <sup>6</sup>	43 <sup>9</sup>	44 <sup>2</sup>	45 <sup>5</sup>	45 <sup>8</sup>	47 <sup>0</sup>	48 <sup>2</sup>	49 <sup>4</sup>	49 <sup>4</sup>
18	44 <sup>9</sup>	44 <sup>6</sup>	44 <sup>6</sup>	45 <sup>0</sup>	45 <sup>9</sup>	47 <sup>2</sup>	47 <sup>7</sup>	48 <sup>2</sup>	48 <sup>7</sup>	50 <sup>4</sup>	51 <sup>1</sup>	51 <sup>1</sup>	51 <sup>1</sup>
19	53 <sup>3</sup>	53 <sup>3</sup>	53 <sup>1</sup>	53 <sup>4</sup>	54 <sup>1</sup>	54 <sup>3</sup>	54 <sup>9</sup>	55 <sup>5</sup>	55 <sup>6</sup>	56 <sup>1</sup>	56 <sup>2</sup>	56 <sup>0</sup>	56 <sup>0</sup>
20	53 <sup>2</sup>	52 <sup>5</sup>	52 <sup>6</sup>	53 <sup>6</sup>	54 <sup>1</sup>	54 <sup>6</sup>	55 <sup>0</sup>	55 <sup>5</sup>	55 <sup>7</sup>	56 <sup>5</sup>	56 <sup>4</sup>	56 <sup>3</sup>	55 <sup>9</sup>
21	52 <sup>7</sup>	52 <sup>3</sup>	51 <sup>5</sup>	51 <sup>1</sup>	50 <sup>6</sup>	50 <sup>6</sup>	50 <sup>3</sup>	50 <sup>2</sup>	50 <sup>2</sup>	50 <sup>4</sup>	51 <sup>1</sup>	51 <sup>7</sup>	51 <sup>8</sup>
22	—	—	—	—	—	—	—	—	—	—	—	—	—
23	47 <sup>4</sup>	47 <sup>5</sup>	48 <sup>2</sup>	48 <sup>9</sup>	50 <sup>0</sup>	50 <sup>6</sup>	51 <sup>2</sup>	51 <sup>5</sup>	51 <sup>7</sup>	53 <sup>0</sup>	52 <sup>4</sup>	52 <sup>2</sup>	52 <sup>3</sup>
24	52 <sup>0</sup>	52 <sup>0</sup>	51 <sup>9</sup>	51 <sup>8</sup>	51 <sup>6</sup>	51 <sup>5</sup>	51 <sup>8</sup>	51 <sup>9</sup>	52 <sup>0</sup>	52 <sup>0</sup>	52 <sup>0</sup>	52 <sup>0</sup>	51 <sup>8</sup>
25 <sup>b</sup>	51 <sup>7</sup>	51 <sup>2</sup>	50 <sup>8</sup>	50 <sup>6</sup>	50 <sup>7</sup>	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	—	—	—	—	—	—	—	—	—
30	—	—	—	—	—	—	—	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	48 <sup>29</sup>	47 <sup>98</sup>	48 <sup>12</sup>	48 <sup>44</sup>	49 <sup>11</sup>	49 <sup>59</sup>	49 <sup>95</sup>	50 <sup>29</sup>	50 <sup>49</sup>	51 <sup>01</sup>	51 <sup>27</sup>	51 <sup>33</sup>	51 <sup>28</sup>

\* Three minutes late.

<sup>b</sup> This day not included in the Sums and Means.





VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.												
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	—	—	—	—	—	—	—	—	—	—	—	—
2*	—	—	—	—	—	—	—	—	—	—	—	—
3	225'9	225'9	222'9	220'9	215'5	214'5	211'7	216'1	216'9	216'9	216'2	215'6
4	221'6	221'2	221'2	216'0	212'7	211'3	213'2	212'9	215'3	216'2	214'0	213'5
5	—	—	—	—	—	—	—	—	—	—	—	—
6	214'5	207'0	202'2	204'9	208'3	210'5	220'4	223'7	230'4	240'1	250'3	236'1
7	214'5	216'6	217'5	216'8	217'2	215'8	215'8	216'2	217'4	218'7	219'5	218'7
8	219'4	219'2	219'3	218'1	217'0	217'4	217'1	218'1	222'3	220'3	220'1	219'4
9	226'4	221'6	223'1	223'1	219'0	218'9	219'1	218'5	218'8	218'8	218'8	217'5
10	—	—	—	—	—	—	—	—	—	—	—	—
11	226'6	226'9	226'9	225'1	224'8	221'7	221'7	221'9	221'7	221'0	221'0	224'2
12	—	—	—	—	—	—	—	—	—	—	—	—
13	228'6	228'9	229'2	229'2	225'6	226'2	227'3	228'2	231'8	231'7	231'0	232'1
14	231'5	224'5	221'6	222'3	221'5	221'8	221'8	221'8	229'3	225'7	231'3	231'3
15	224'2	224'5	224'6	223'6	221'9	221'9	221'9	223'6	224'4	224'4	228'5	230'4
16	209'0	217'2	216'2	216'4	221'4	223'0	229'3	233'5	226'2	238'1	237'8	235'5
17	222'9	223'9	223'9	220'4	219'5	218'3	219'9	218'4	217'9	220'1	219'6	215'6
18	217'4	216'1	216'1	214'7	214'3	212'9	212'9	212'8	212'8	211'2	210'2	209'3
19	—	—	—	—	—	—	—	—	—	—	—	—
20	223'6	222'4	219'5	218'0	214'4	212'5	211'1	212'5	213'5	213'5	213'5	213'5
21	210'8	210'8	209'2	207'4	204'0	202'1	200'1 <sup>b</sup>	200'4	200'4	200'3	201'0	200'4
22	202'2	203'3	203'3	205'2	203'7	204'7	205'0	201'5	204'7	206'3	206'4	207'6
23	202'8	202'7	203'7	202'7	202'1	200'6	199'6	199'4	200'6	202'7	203'5	203'1
24	203'1	202'2	202'5	202'7	203'3	203'3	202'9	203'2	202'5	203'0	202'9	202'7
25	201'4	203'8	203'8	203'7	204'5	205'7	204'8	204'6	208'7	209'6	208'6	215'6
26	—	—	—	—	—	—	—	—	—	—	—	—
27	218'8	216'3	213'5	211'0	208'2	208'1	207'7	208'8	208'8	207'9	208'5	205'4
28	209'4	208'2	207'6	206'6	206'8	204'6	203'7	203'9	203'9	203'1	204'3	206'3
29	210'3	210'3	209'9	209'3	208'0	207'4	208'8	207'6	208'6	208'6	208'6	209'8
30	208'6	209'5	207'6	207'3	206'3	203'0	204'7	201'5	201'8	203'9	202'6	201'9
Hourly Means	216'24	215'91	215'01	214'15	213'04	212'43	213'08	213'57	215'16	216'09	216'70	215'89

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
1	—	—	—	—	—	—	—	—	—	—	—	—
2*	—	—	—	—	—	—	—	—	—	—	—	—
3	47'6	48'2	49'6	49'6	51'0	51'3	52'0	52'4	52'4	52'8	53'6	53'6
4	50'3	50'6	50'2	52'2	52'4	53'2	53'5	51'3	51'2	51'6	53'3	53'6
5	—	—	—	—	—	—	—	—	—	—	—	—
6	51'1	53'4	53'5	53'6	51'6	53'3	55'5	55'8	56'1	56'5	56'7	57'1
7	55'0	51'5	51'2	54'5	51'7	55'2	56'6	56'3	56'4	56'6	56'6	56'3
8	52'5	52'5	53'0	52'9	52'7	52'6	52'9	52'7	52'7	52'7	52'6	53'3
9	49'2	49'5	50'3	51'0	51'8	52'2	52'1	52'4	52'6	53'2	53'6	53'6
10	—	—	—	—	—	—	—	—	—	—	—	—
11	48'5	48'3	47'7	48'5	49'4	49'9	51'0	52'1	51'9	52'5	52'4	51'8
12	—	—	—	—	—	—	—	—	—	—	—	—
13	41'2	41'3	41'3	41'7	45'4	45'8	45'6	45'1	45'0	45'7	46'2	46'6
14	44'4	46'0	46'8	47'0	47'1	47'5	47'4	47'6	47'8	48'6	49'1	49'0
15	48'3	48'4	48'1	48'7	49'0	48'5	48'8	48'8	49'3	49'3	49'8	50'2
16	47'2	47'6	48'7	49'0	49'6	49'8	49'9	50'1	50'5	51'0	51'3	51'5
17	50'0	50'3	50'8	51'6	53'1	54'3	54'8	55'3	55'6	56'0	56'3	56'7
18	53'5	54'0	54'0	54'4	55'1	55'5	55'7	56'3	56'3	57'2	57'3	58'2
19	—	—	—	—	—	—	—	—	—	—	—	—
20	50'7	51'3	52'9	52'6	54'1	55'2	55'3	56'0	56'3	57'0	57'5	58'2
21	57'1	57'0	57'2	58'2	59'3	60'0	60'0	61'0	62'0	62'5	62'5	62'2
22	59'0	59'2	59'0	58'7	58'5	58'5	58'5	59'1	59'2	59'3	59'4	59'6
23	60'1	59'7	59'0	59'2	60'0	60'0	60'4	60'4	60'3	60'5	61'0	60'0
24	59'6	59'1	59'3	59'4	59'4	59'8	60'2	60'2	61'0	60'8	60'8	60'8
25	59'8	59'1	59'2	58'8	58'3	58'3	58'3	59'2	59'0	58'5	58'4	58'4
26	—	—	—	—	—	—	—	—	—	—	—	—
27	51'3	52'3	53'7	54'3	55'8	56'3	56'5	57'1	57'5	57'6	58'5	59'3
28	56'3	57'2	57'8	57'7	58'3	58'4	59'0	59'2	59'2	59'2	59'0	59'2
29	57'2	57'5	57'0	56'6	57'1	57'3	57'3	57'5	57'5	57'5	57'3	56'8
30	57'2	57'2	57'3	58'0	58'5	59'0	59'2	59'5	60'0	60'1	60'0	60'5
Hourly Means	52'74	52'95	53'20	53'53	54'14	54'52	54'80	55'15	55'32	55'63	55'88	56'02

\* Not included in the Means.

<sup>b</sup> Two minutes late.

Temperature, 1°64.

10 <sup>h</sup> .	11 <sup>h</sup> .
218°0	218°9
216°2	215°6
211°0	213°5
250°3	236°1
219°5	218°7
220°1	219°4
218°8	217°5
221°0	224°2
234°0	232°1
231°3	231°3
228°5	230°4
237°8	235°5
219°6	215°6
210°2	209°3
213°5	213°5
201°0	200°1
206°4	207°6
203°5	203°1
202°9	202°7
208°6	215°6
208°5	205°4
201°3	206°3
208°6	209°8
202°6	201°9
216°70	215°89

VERTICAL FORCE

One Scale Division = 0.000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
218°9	218°9	220°5	219°9	220°9	219°8	221°1	223°1	214°1	217°9	222°5	225°4	—
216°1	215°8	215°5	216°4	218°9	219°2	220°7	220°7	221°3	221°9	221°6	221°6	218°82
212°1	214°4	214°1	215°2	214°6	215°3	—	—	—	—	—	—	—
227°7	224°5	221°5	223°3	221°3	221°3	212°4	212°5	215°6	215°6	215°6	214°5	215°05
218°7	215°7	215°7	215°4	214°3	206°0	210°0	214°5	217°5	207°3	198°9	214°6	218°91
219°4	218°5	218°9	218°5	219°8	219°5	219°1	218°4	223°8	223°8	223°8	226°4	214°60
218°5	218°4	218°2	218°4	220°7	220°7	—	—	—	—	—	—	219°89
221°2	221°4	221°0	223°0	223°0	223°0	219°5	218°2	225°8	228°3	228°3	225°5	221°55
229°3	234°3	230°6	225°4	227°5	232°1	231°1	232°9	232°6	231°0	231°0	231°0	225°86
231°1	231°1	226°9	226°6	223°7	224°3	232°3	231°9	231°9	231°3	233°7	232°4	230°37
230°4	223°6	228°1	227°1	223°7	223°5	209°8	—	205°6	205°1	204°6	203°1	225°13
236°5	235°9	232°8	225°6	210°1	211°2	214°0	206°2	—	197°1	215°4	221°3	220°80
213°1	213°4	213°4	212°7	212°7	212°7	212°1	213°8	213°8	211°0	212°7	214°2	222°60
209°3	211°1	211°1	210°6	210°6	—	—	—	—	—	—	—	216°63
213°5	211°5	209°5	209°5	209°5	209°5	206°5	215°6	219°3	219°3	219°3	221°1	213°59
200°4	200°4	200°2	200°2	200°6	200°2	195°4	201°7	204°4	201°1	201°0	206°3	212°90
209°4	209°1	202°5	200°3	200°6	203°1	203°3	203°7	201°2	204°4	204°5	201°7	202°81
203°1	200°9	201°5	202°6	202°8	202°8	203°6	203°7	203°7	202°5	201°2	201°2	201°32
201°2	202°6	202°6	202°6	200°6	202°8	220°3	193°9	188°0	193°7	193°5	202°7	202°46
215°6	213°1	213°3	213°3	198°7	208°6	—	—	—	—	—	—	200°78
204°5	201°3	201°5	206°1	201°0	202°5	212°6	213°7	215°7	216°3	218°0	217°6	209°65
205°6	206°7	206°7	206°6	206°5	206°6	205°8	206°7	206°7	206°0	209°3	209°3	208°03
209°8	209°8	209°8	210°6	210°4	209°0	209°1	205°5	206°6	208°4	208°4	210°3	206°43
201°0	201°0	201°5	201°5	201°5	201°0	201°5	200°8	200°6	200°6	202°6	202°5	208°93
202°6	201°9	—	—	—	—	—	—	—	—	—	—	202°99
215°21	214°82	214°18	213°51	212°00	212°13	212°3	212°05	213°03	211°98	212°93	214°95	214°02

52°3	52°3
53°6	53°6
55°3	55°6
56°7	57°1
56°6	56°3
52°6	53°3
53°6	53°6
52°4	51°8
46°2	46°6
49°1	49°0
49°8	50°2
51°3	51°5
56°3	56°7
57°3	58°2
57°5	58°2
62°5	62°2
59°4	59°6
61°0	60°0
60°8	60°8
58°4	58°4
58°5	59°3
59°0	59°2
57°3	56°8
60°0	60°5
55°88	56°02

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

52°2	52°2	51°7	51°0	51°0	50°5	50°3	49°7	49°0	48°8	48°4	48°2	—
51°3	51°8	51°2	53°1	52°5	52°0	51°7	51°6	51°3	51°2	51°1	51°0	51°76
55°7	55°5	55°3	55°0	55°1	51°7	—	—	—	—	—	—	53°84
56°7	58°0	58°0	56°5	56°0	55°5	55°3	55°4	55°2	55°2	55°2	55°3	55°60
56°3	56°8	56°9	56°8	56°6	56°5	56°2	55°6	55°5	51°5	51°3	53°4	55°68
51°0	53°5	52°9	51°8	51°6	51°5	51°0	50°5	50°2	50°0	49°5	49°4	52°04
53°0	53°2	53°3	52°5	51°7	51°5	—	—	—	—	—	—	50°92
51°4	50°9	50°8	50°6	50°3	50°0	—	46°8	47°5	47°5	47°7	48°0	47°8
46°6	46°6	46°6	45°8	45°4	45°2	44°6	44°5	44°4	44°3	44°3	44°4	48°94
49°0	49°0	48°8	49°2	49°0	49°2	49°0	48°8	48°4	48°6	48°8	47°6	45°20
50°5	51°0	51°2	51°3	50°5	49°7	49°5	—	49°3	49°1	48°3	47°5	48°07
51°9	52°8	52°7	52°3	51°7	51°6	51°5	51°2	—	50°8	50°2	50°2	49°33
56°6	56°8	56°3	56°6	56°2	56°0	55°8	55°5	54°7	54°6	51°0	51°0	50°57
58°3	58°3	58°2	57°8	57°6	57°4	—	—	—	—	—	—	55°28
58°0	58°5	58°5	58°2	57°8	57°6	57°5	57°8	57°7	57°5	57°5	57°2	56°29
62°4	62°0	62°0	62°2	62°0	61°8	61°8	61°0	60°6	60°1	59°8	59°6	60°60
60°0	60°0	61°1	61°1	60°6	60°2	60°0	60°0	59°2	59°4	60°6	60°6	59°62
60°0	60°2	60°4	60°2	60°0	59°8	59°6	59°7	59°6	59°6	59°8	59°8	59°97
60°8	60°9	60°8	60°8	60°6	60°5	60°3	60°4	60°2	60°4	60°4	60°0	60°28
57°8	57°6	57°3	57°2	57°0	56°6	—	—	—	—	—	—	56°70
59°4	59°5	59°4	59°1	58°7	58°1	58°1	57°7	57°1	56°6	56°9	56°2	56°90
59°0	59°2	59°0	58°3	58°1	58°1	58°1	58°1	58°1	57°7	57°4	57°0	58°28
57°0	57°0	57°2	57°4	57°4	57°3	57°2	57°3	57°2	57°3	57°5	57°3	57°24
60°5	60°5	60°5	60°5	60°7	60°7	61°0	60°4	60°2	60°0	60°0	59°6	59°63
56°05	56°16	56°15	55°85	55°53	55°28	54°33	54°33	54°02	53°76	53°66	53°42	54°69

\* Three minutes late.

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	204'2	203'4	201'8	200'0	198'8	198'8	199'5	199'5	200'2	200'4	200'4	201'3
2	199'5	200'0	200'4	197'6	196'5	195'6	195'6	196'6	199'8	198'8	198'7	198'8
3	—	—	—	—	—	—	—	—	—	—	—	—
4	203'6	203'4	201'9	198'6	203'2	201'4	202'3	201'9	203'1	200'3	220'5	222'2
5	204'2	202'3	199'3	199'3	199'3	201'2	202'2	202'8	205'8	207'1	209'2	210'2
6	203'6	203'6	202'3	200'0	197'0	199'2	199'7	199'7	203'9	206'0	203'0	204'2
7	207'4	206'9	206'0	206'0	201'1	202'8	201'9	204'9	205'2	207'3	203'3	205'3
8	204'0	203'9	203'0	200'6	199'0	199'3	198'7	198'7	201'3	202'4	204'3	205'1
9	201'2	201'2	199'5	199'2	199'8	202'4	197'7	202'4	209'6	214'6	216'0	210'2
10	—	—	—	—	—	—	—	—	—	—	—	—
11	209'8	209'7	211'4	215'2	214'8	215'6	215'1	216'3	218'3	218'3	217'8	218'7
12	206'2	196'9	211'0	211'0	212'2	211'5	215'3	225'0	233'5	216'5	216'3	244'3
13	201'7	205'2	209'7	210'7	210'7	211'9	211'6	211'6	210'3	213'8	207'6	205'2
14	199'9	199'0	199'4	198'4	198'1	198'1	196'8	198'4	198'4	197'4	195'8	195'9
15	196'0	199'4	199'4	199'4	198'4	198'4	195'1	197'0	197'0	196'3	195'6	197'9
16	205'6	205'4	203'7	202'1	198'3	195'2	191'3	194'5	194'5	195'6	196'2	195'3
17	—	—	—	—	—	—	—	—	—	—	—	—
18	199'4	199'0	198'8	199'4	195'1	193'9	193'1	194'6	197'9	198'5	199'1	200'2
19	215'8	213'1	210'3	207'0	206'6	206'6	206'7	209'1	209'1	209'4	209'4	207'6
20	205'1	206'1	205'4	203'2	203'2	201'1	201'1	201'1	208'5	203'6	203'6	203'6
21	191'9	200'2	199'0	199'0	205'4	206'2	206'0	206'0	211'0	209'2	208'1	206'6
22	210'4	204'3	205'3	205'8	201'5	201'1	201'2	201'4	205'7	207'0	207'0	207'0
23	210'7	208'5	201'0	203'2	199'8	203'8	203'8	200'7	200'8	200'8	199'2	198'4
24	—	—	—	—	—	—	—	—	—	—	—	—
25	193'7	191'5	191'0	193'3	193'0	193'0	193'1	191'1	191'4	196'7	191'6	191'6
26	192'9	191'9	188'5	188'5	186'3	186'1	181'0	180'7	179'1	180'6	182'0	183'0
27	186'8	181'5	183'0	182'7	178'3	176'9	177'5	178'4	178'9	178'9	177'5	178'4
28	184'3	182'9	180'9	179'5	178'3	177'2	178'1	178'1	178'9	179'1	179'7	180'3
29	187'0	185'7	183'8	182'7	182'7	178'0	178'3	178'3	178'3	178'3	178'1	181'4
30	181'5	183'0	184'5	184'3	182'6	179'1	177'2	177'7	179'6	183'2	185'9	191'6
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	200'36	199'77	199'36	198'71	197'92	197'77	197'58	198'30	200'12	200'36	201'53	201'82

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
1	59'5	59'6	59'8	60'0	60'2	60'3	60'1	60'4	60'8	61'0	61'0	61'2
2	60'6	60'6	61'0	61'5	62'1	62'6	63'0	63'6	63'8	64'3	64'6	64'4
3	—	—	—	—	—	—	—	—	—	—	—	—
4	59'0	59'4	60'0	61'2	62'0	63'0	63'3	63'2	63'6	64'0	64'4	65'2
5	60'8	60'8	61'0	60'6	61'0	61'4	61'4	61'6	61'6	62'3	62'5	62'6
6	61'6	61'6	61'0	61'6	62'0	62'3	62'4	62'0	61'6	62'0	62'1	62'2
7	57'7	58'5	58'7	58'9	59'1	59'6	59'8	60'0	60'0	60'0	60'2	60'4
8	58'8	60'0	60'1	60'8	61'6	62'0	62'6	62'4	62'8	63'8	63'4	63'0
9	61'4	61'2	61'0	61'0	61'0	61'2	61'5	61'4	61'4	61'0	61'0	61'0
10	—	—	—	—	—	—	—	—	—	—	—	—
11	52'7	52'7	52'8	52'1	51'8	52'3	52'5	52'7	53'0	53'3	54'0	54'3
12	54'2	54'8	55'7	56'5	57'0	57'5	57'7	58'0	58'4	58'9	59'5	59'6
13	56'9	56'9	56'7	57'2	58'1	59'0	59'3	59'6	60'0	61'0	61'6	62'0
14	61'6	61'6	62'1	63'0	63'6	64'4	64'6	64'8	65'2	65'6	65'9	65'8
15	63'0	62'4	62'0	62'0	62'0	62'2	62'8	63'3	63'4	63'7	64'0	64'0
16	59'7	59'6	59'7	60'0	61'0	62'0	62'4	63'0	63'4	63'9	64'4	64'2
17	—	—	—	—	—	—	—	—	—	—	—	—
18	62'7	62'3	61'6	61'9	61'6	61'6	61'2	61'0	61'4	61'0	60'7	60'5
19	55'6	56'3	56'7	57'3	57'8	58'3	58'0	58'2	58'2	58'8	59'3	59'7
20	56'3	57'0	58'1	58'4	59'0	59'0	59'3	59'7	61'0	61'4	61'6	61'6
21	58'3	59'0	59'2	59'4	59'4	59'5	59'5	59'4	59'3	59'3	59'3	60'0
22	54'8	55'8	56'6	57'0	58'5	59'0	59'2	59'8	59'9	60'0	60'0	60'0
23	57'3	57'4	58'6	59'2	59'8	60'6	61'0	61'1	61'9	62'9	63'4	63'6
24	—	—	—	—	—	—	—	—	—	—	—	—
25	61'4	61'6	62'0	62'6	63'4	64'5	65'1	66'0	66'3	66'6	67'0	67'3
26	65'6	66'4	67'0	67'5	68'7	69'3	69'8	70'3	71'0	71'6	72'8	73'0
27	68'8	69'6	70'0	70'8	71'7	72'4	72'6	72'7	73'1	73'6	73'8	74'3
28	69'4	70'0	70'5	71'0	71'3	71'3	71'3	71'5	72'1	72'2	71'8	71'8
29	69'1	69'2	69'7	70'1	70'3	70'7	70'9	71'0	71'5	71'9	71'9	71'5
30	70'0	69'0	68'5	68'7	68'9	69'5	69'9	70'7	71'3	71'5	72'0	72'6
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	60'65	60'90	61'17	61'55	62'03	62'52	62'75	62'98	63'31	63'68	63'93	64'07

re, 1'64.

10h.	11h.
200'4	201'3
198'7	198'8
—	—
220'5	222'2
209'2	210'2
203'0	204'2
203'3	205'3
204'3	205'1
216'0	210'2
—	—
217'8	218'7
216'3	244'3
207'6	205'2
195'8	195'9
195'6	195'9
196'2	195'3
—	—
199'1	200'2
209'4	207'6
203'6	203'6
208'1	206'6
207'0	207'0
199'2	198'4
—	—
191'6	194'6
182'0	183'0
177'5	178'4
179'7	180'3
179'1	181'4
185'9	191'6
—	—
201'53	201'82

VERTICAL FORCE.

One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 201'2	Sc. Div. 201'5	Sc. Div. 200'8	Sc. Div. 200'7	Sc. Div. 200'7	Sc. Div. 201'2	Sc. Div. 198'9	Sc. Div. 199'3	Sc. Div. 199'2	Sc. Div. 199'2	Sc. Div. 199'2	Sc. Div. 199'2	Sc. Div. 200'39
196'5	196'3	196'1	193'9	193'3	193'3	—	—	—	—	—	—	—
—	209'0	195'7	205'6	175'0	185'4	177'7	189'0	195'2	195'2	200'7	202'6	196'15
—	210'2	208'9	205'5	203'9	192'9	193'9	191'9	194'7	197'8	198'7	201'3	200'42
—	201'9	201'5	200'5	199'5	199'6	199'1	201'6	202'5	201'4	201'4	204'5	201'68
—	209'2	209'2	205'5	201'2	203'5	202'0	203'6	196'3	198'8	203'2	206'0	204'52
—	206'5	204'4	202'1	201'7	201'2	199'0	198'9	200'1	200'1	200'3	200'9	201'51
—	207'0	204'9	202'3	200'6	200'6	200'1	—	—	—	—	—	—
—	—	—	—	—	—	207'5	208'0	209'2	210'3	209'6	209'6	205'15
217'8	218'7	223'7	229'4	214'5	202'7	216'0	210'5	210'1	200'6	184'6	169'3	211'67
216'3	214'3	207'5	208'2	191'5	199'6	212'3	198'2	207'5	209'4	207'4	195'7	212'64
207'6	205'2	204'2	201'2	193'4	191'7	191'7	197'9	200'4	200'4	201'3	199'5	203'82
195'8	195'9	196'9	195'7	190'0	193'6	193'8	192'9	193'2	195'9	195'9	195'9	196'32
195'6	195'9	197'1	196'4	198'2	198'9	198'9	198'9	200'2	200'2	200'9	201'7	198'52
196'2	195'3	194'6	191'6	195'4	197'3	197'5	—	—	—	—	—	—
—	—	—	—	—	—	204'8	207'3	205'9	205'6	205'1	205'2	199'56
—	—	—	—	—	—	208'5	203'1	205'7	201'6	206'3	212'6	215'4
199'1	200'2	198'8	203'3	209'5	208'5	205'6	193'4	202'7	207'2	201'3	196'3	208'4
209'4	207'6	204'7	204'7	206'3	209'4	205'6	198'2	198'6	202'2	203'4	205'9	202'9
203'6	203'6	201'4	201'4	201'8	200'8	198'2	198'6	200'8	202'2	203'4	205'9	203'15
208'1	206'6	204'9	205'6	206'4	206'9	206'9	206'9	207'0	201'3	202'0	200'2	201'82
207'0	207'0	206'3	206'3	206'3	206'3	206'3	206'0	206'2	206'2	206'2	195'6	206'7
199'2	198'4	197'2	196'6	196'6	201'6	210'3	209'7	—	—	—	—	—
—	—	—	—	—	—	—	192'2	191'2	197'4	196'9	199'3	196'4
191'6	194'6	191'6	190'2	190'1	190'9	190'9	190'3	190'3	190'5	191'1	192'7	192'3
182'0	183'0	181'9	181'9	182'7	182'7	181'0	182'9	182'9	182'9	182'9	182'7	184'05
177'5	178'4	177'0	177'0	177'0	177'3	177'3	177'6	180'0	180'9	179'4	180'0	178'7
179'7	180'3	180'3	180'3	180'3	181'7	182'5	183'4	181'2	183'9	185'2	185'2	181'15
179'1	181'4	182'5	182'7	182'9	179'9	174'3	177'1	174'4	179'2	182'1	180'6	174'3
185'9	191'6	185'5	185'7	190'9	167'9	167'6	—	—	—	—	—	—
—	—	—	—	—	—	—	170'2	180'0	185'0	180'1	181'9	180'9
—	—	—	—	—	—	—	—	—	—	—	—	—
199'81	199'00	198'09	198'28	195'51	191'92	194'48	196'10	197'68	197'48	197'02	197'24	198'30

61'0	61'2
61'6	61'4
—	—
61'4	65'2
62'5	62'6
62'1	62'2
60'2	60'4
63'4	63'0
61'0	61'0
—	—
51'0	54'3
59'5	59'6
61'6	62'0
65'9	65'8
61'0	61'0
61'4	64'2
—	—
60'7	60'5
59'3	59'7
61'6	61'6
59'3	60'0
60'0	60'0
63'4	63'6
—	—
67'0	67'3
72'8	73'0
73'8	74'3
71'8	71'8
71'9	71'5
72'0	72'6
—	—
63'93	64'07

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

61'2	61'3	61'3	61'1	61'0	61'0	61'2	61'4	61'3	61'2	61'0	60'8	60'75
61'6	61'6	61'4	61'5	61'6	61'6	—	—	—	—	—	—	—
—	—	—	—	—	—	63'4	62'7	61'7	61'2	60'5	59'6	62'85
65'6	65'6	66'6	65'8	65'2	66'6	61'7	63'6	62'8	62'0	61'6	61'5	63'33
62'6	62'8	62'6	62'8	62'6	62'4	62'0	61'8	61'8	61'6	61'4	61'2	61'80
62'2	62'2	61'7	61'7	61'6	60'8	60'4	60'0	59'6	59'2	58'5	58'2	61'19
60'4	60'4	60'7	60'4	60'0	59'8	59'7	59'0	58'8	58'7	58'9	58'7	59'52
63'0	62'8	62'8	62'6	62'6	62'4	62'6	62'2	62'2	62'0	61'9	62'0	62'11
61'0	61'0	61'4	61'4	61'5	61'6	—	—	—	—	—	—	—
—	—	—	—	—	—	57'3	56'8	56'2	55'7	55'3	54'7	59'92
55'0	55'0	54'9	54'8	54'8	54'8	54'4	54'0	54'0	54'0	53'8	53'8	53'65
60'4	60'6	61'8	61'8	61'2	60'4	59'4	59'2	58'8	57'8	57'5	57'4	58'50
62'8	62'8	63'0	62'6	62'4	62'0	62'0	62'4	62'2	62'2	62'0	61'7	60'68
66'0	65'8	65'6	65'4	65'3	65'0	64'8	64'6	64'5	64'5	64'5	63'6	64'49
64'6	64'2	63'8	63'1	62'6	62'0	61'8	61'6	61'2	60'7	60'5	60'0	62'54
61'6	61'6	61'4	61'2	63'8	63'4	—	—	—	—	—	—	—
—	—	—	—	—	—	64'2	64'4	63'8	63'4	63'8	63'3	62'97
60'4	60'0	59'7	59'5	59'0	58'8	58'2	57'4	56'7	56'0	55'8	55'3	59'76
59'7	59'5	59'5	59'2	58'5	58'2	57'8	57'5	57'3	57'6	57'5	56'0	58'02
62'2	62'0	61'8	61'8	61'6	61'2	60'6	60'2	59'7	59'3	58'8	57'5	59'96
60'0	59'6	59'4	58'6	58'3	58'0	57'5	57'0	56'4	55'8	55'4	54'8	58'43
59'8	59'6	59'3	58'9	58'7	58'7	58'6	58'5	57'8	57'6	57'1	57'7	58'47
63'6	63'6	63'8	63'6	63'5	63'3	—	—	—	—	—	—	—
—	—	—	—	—	—	62'6	62'4	62'2	62'0	61'6	61'2	61'68
67'2	67'3	67'8	67'8	67'4	67'2	66'8	67'2	66'6	66'6	66'1	65'6	65'72
73'0	73'2	72'6	71'5	71'5	71'0	70'5	70'1	69'9	69'6	69'2	68'6	70'15
74'5	74'7	74'3	74'2	73'6	73'6	73'1	72'0	71'4	71'0	70'2	69'4	72'31
71'8	71'9	72'1	72'1	71'6	71'1	70'8	70'4	70'2	70'0	69'4	68'3	70'99
71'9	71'5	70'8	70'5	70'9	72'3	72'3	72'3	70'8	70'5	71'5	71'2	71'02
72'0	72'6	72'2	72'3	72'0	71'5	—	—	—	—	—	—	—
—	—	—	—	—	—	71'5	71'5	71'2	70'5	70'2	69'4	70'84
64'24	64'17	64'15	63'95	63'74	63'53	63'01	62'70	62'27	61'95	61'71	61'21	62'76





VERTICAL FORCE.													12 <sup>b</sup> .
One Scale Division = .000067 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.													
Mean Galtin- gen Time.	0 <sup>b</sup> .	1 <sup>b</sup> .	2 <sup>b</sup> .	3 <sup>b</sup> .	4 <sup>b</sup> .	5 <sup>b</sup> .	6 <sup>b</sup> .	7 <sup>b</sup> .	8 <sup>b</sup> .	9 <sup>b</sup> .	10 <sup>b</sup> .	11 <sup>b</sup> .	12 <sup>b</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	174'8	172'3	169'5	169'5	168'6	169'7	170'9	163'8	165'7	165'7	167'9	171'0	172'7
2	160'7	163'7	167'4	169'9	167'0	169'8	171'0	172'5	174'3	176'0	176'0	175'1	178'4
3	169'0	167'7	168'1	167'1	169'4	170'8	172'8	174'3	176'3	175'1	179'5	178'8	181'5
4	170'0	171'8	170'5	174'6	176'5	176'5	175'5	174'7	175'0	174'6	173'0	172'5	174'2
5	—	—	—	—	—	—	—	—	—	—	—	—	—
6	144'4	166'5	166'1	170'7	171'5	172'7	171'0	172'3	173'4	172'8	175'5	179'0	176'8
7	180'5	181'2	179'5	179'0	180'4	177'8	176'4	174'8	177'4	179'3	177'2	175'3	176'6
8	180'7	183'0	185'5	181'3	182'0	181'2	180'2	178'5	177'7	177'8	179'8	179'8	179'5
9	179'7	177'9	176'3	175'0	172'2	172'3	168'9	169'3	173'3	174'5	175'0	175'6	175'2
10	172'7	170'9	169'1	166'4	163'8	162'0	160'6	161'7	160'4	158'6	159'0	158'3	159'8
11	161'3	163'4	161'5	156'4	157'5	158'4	160'3	160'3	163'3	161'3	161'3	171'9	169'5
12	—	—	—	—	—	—	—	—	—	—	—	—	—
13	172'3	168'0	167'2	169'7	168'7	170'8	173'7	173'6	179'8	181'0	186'9	181'2	178'2
14	182'7	186'2	181'4	181'4	180'6	181'5	183'5	181'6	184'6	187'0	187'5	190'8	188'2
15	185'3	188'8	185'0	188'0	189'1	190'1	190'1	191'5	190'3	190'8	192'9	193'8	191'2
16	190'5	185'2	187'5	187'5	188'1	189'6	190'5	189'1	191'5	191'1	191'1	190'8	189'8
17	191'4	191'4	190'1	188'0	186'9	186'4	187'3	188'3	184'3	184'3	182'1	184'9	181'9
18	182'8	183'7	181'6	181'7	181'6	182'1	183'1	185'3	186'7	186'7	186'8	186'3	186'4
19	—	—	—	—	—	—	—	—	—	—	—	—	—
20	180'4	178'5	177'3	176'0	175'0	175'0	176'0	173'5	175'4	175'5	173'9	172'7	172'9
21	177'2	176'0	175'0	171'5	172'9	169'1	168'4	168'4	167'4	168'3	168'8	170'0	170'4
22	176'8	177'2	177'2	176'2	178'0	177'9	177'0	175'2	174'2	171'0	168'3	172'7	172'7
23	170'2	172'9	173'0	171'0	169'7	169'8	168'9	167'9	169'9	173'1	173'4	174'1	173'2
24	175'3	175'9	175'5	171'9	172'3	173'6	173'3	176'5	179'8	178'7	180'5	183'2	183'2
25	182'9	180'5	180'5	175'6	172'1	171'4	171'6	174'4	180'2	178'7	178'4	176'4	173'1
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	179'0	178'5	175'4	174'2	171'2	170'1	169'2	169'2	171'4	173'5	174'5	176'4	173'8
28	176'8	179'5	178'1	178'6	176'6	173'6	172'2	171'5	173'2	171'4	171'4	174'3	171'6
29	173'1	173'0	166'6	161'6	162'8	161'6	164'1	174'1	167'9	167'6	163'4	161'9	167'2
30	162'7	162'3	165'6	163'9	162'6	163'1	162'6	161'8	160'5	161'7	166'0	171'7	163'4
31	168'9	168'8	168'8	171'7	167'9	168'6	168'7	169'9	173'9	171'5	172'4	176'6	171'9
Hourly Means	174'90	175'73	174'90	171'57	173'74	173'55	173'62	173'85	175'10	175'54	176'15	177'30	176'53
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
	1	2	3	4	5	6	7	8	9	10	11	12	13
	74'3	75'0	75'2	75'8	76'7	77'3	77'5	77'5	77'9	78'3	78'3	78'1	77'9
1	74'3	75'0	75'2	75'8	76'7	77'3	77'5	77'5	77'9	78'3	78'3	78'1	77'9
2	73'6	73'8	74'3	74'7	75'0	75'5	76'4	75'7	75'8	75'9	75'9	75'7	75'9
3	72'5	72'5	72'9	73'5	73'9	74'5	74'6	74'6	74'6	74'7	74'8	75'0	75'0
4	70'3	70'7	71'1	71'6	72'0	73'0	73'6	74'3	74'5	75'3	75'7	75'8	76'4
5	—	—	—	—	—	—	—	—	—	—	—	—	—
6	73'7	74'1	74'5	74'6	75'1	75'2	75'4	75'6	75'8	76'8	77'3	77'9	77'7
7	73'0	72'6	72'2	72'7	73'5	73'8	73'8	74'0	74'2	74'3	74'9	75'2	75'2
8	70'2	70'0	69'6	69'8	70'0	70'5	70'7	71'1	71'5	72'8	73'5	74'0	74'4
9	72'1	72'5	73'0	73'7	74'3	74'2	74'3	74'1	74'1	74'5	74'2	75'0	75'8
10	76'1	76'3	76'6	77'5	78'3	79'7	81'2	82'0	81'6	82'6	83'7	83'2	82'5
11	77'5	78'0	78'2	78'3	79'0	80'0	80'5	80'8	80'9	80'7	80'3	80'3	80'1
12	—	—	—	—	—	—	—	—	—	—	—	—	—
13	73'4	73'2	73'4	73'5	73'5	73'7	73'7	73'7	74'2	74'3	74'4	75'2	75'2
14	69'7	69'8	70'0	70'5	70'3	70'3	70'3	70'2	70'2	70'3	70'1	69'7	69'7
15	65'1	64'8	65'5	66'0	66'0	66'2	66'4	66'0	66'1	66'6	66'3	66'6	66'9
16	65'0	65'0	65'5	65'5	65'6	66'0	66'0	66'0	66'5	66'7	66'9	67'3	68'0
17	64'6	65'0	65'4	66'0	66'7	67'6	67'4	68'0	68'5	69'3	69'5	69'6	69'8
18	65'6	66'4	66'5	67'7	68'0	69'2	69'0	69'6	70'0	70'7	71'0	71'3	71'5
19	—	—	—	—	—	—	—	—	—	—	—	—	—
20	71'4	71'5	71'5	72'0	72'5	73'1	73'7	74'2	74'4	74'7	75'3	75'5	75'8
21	72'5	72'5	72'8	73'5	74'0	74'0	75'5	75'6	75'9	76'5	76'5	76'5	76'3
22	72'4	72'0	72'0	72'3	72'5	72'7	73'0	73'5	73'7	74'3	74'5	74'7	74'7
23	72'1	72'1	72'5	73'2	73'7	74'0	74'3	74'5	75'4	75'8	76'1	76'3	76'4
24	73'7	73'8	73'4	73'0	73'0	73'0	72'5	72'5	72'3	72'5	72'5	72'5	72'5
25	70'5	71'3	71'5	72'0	72'8	73'3	73'5	74'0	74'8	75'1	75'5	76'0	76'0
26	—	—	—	—	—	—	—	—	—	—	—	—	—
27	72'1	72'3	73'0	73'0	74'5	74'5	74'5	74'1	74'3	74'5	74'8	75'0	75'0
28	70'5	69'3	71'6	71'5	71'9	73'1	73'4	73'8	74'4	74'5	75'0	74'8	75'0
29	72'8	73'3	73'9	74'8	75'5	76'3	77'0	77'3	77'3	78'0	78'6	78'9	78'5
30	76'8	77'2	77'4	77'5	78'0	78'6	78'7	79'2	79'7	80'3	80'7	80'7	80'7
31	76'0	75'8	75'5	76'0	75'9	75'8	76'4	76'5	76'7	77'0	77'7	77'5	77'5
Hourly Means	71'76	71'88	72'18	72'60	73'04	73'52	73'83	74'01	74'27	74'70	74'96	75'12	75'20

\* Four minutes late.

\* Fifteen minutes late.

VOL.





VERTICAL FORCE.												
One Scale Division = '000067 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	174'9	175'0	171'4	171'5	170'5	169'3	173'6	170'7	171'7	174'5	175'9	177'8
2	—	—	—	—	—	—	—	—	—	—	—	—
3	177'3	170'6	174'7	172'9	171'8	170'6	170'8	172'0	171'4	169'0	169'0	170'7
4	167'8	171'3	170'0	169'7	167'6	166'8	165'4	164'6	165'7	164'0	162'3	162'0
5	167'9	167'4	165'5	164'6	162'6	161'8	161'8	161'8	160'3	159'8	161'7	157'5
6	163'2	162'1	159'7	158'8	159'3	158'8	157'0	159'1	158'2	159'7	159'3	164'3
7	143'7	153'3	156'2	158'5	162'3	165'7	165'4	166'5	165'7	180'9	169'2	167'9
8	158'2	157'2	164'4	165'4	167'7	171'6	171'6	172'3	175'0	179'6	175'8	171'0
9	—	—	—	—	—	—	—	—	—	—	—	—
10	169'8	169'8	174'8	176'8	176'2	175'8	176'4	174'8	172'5	174'0	173'4	173'4
11	182'8	182'0	179'6	178'7	175'5	174'8	175'0	173'3	174'6	175'9	173'1	174'5
12	182'0	180'8	179'8	179'8	177'3	172'2	172'2	173'5	177'8	177'1	179'7	182'6
13	169'8	164'4	159'7	162'6	161'5	165'5	165'8	166'7	167'2	168'7	167'2	166'0
14	170'7	174'1	166'2	165'0	166'5	167'5	166'8	166'8	172'9	176'0	181'1	173'1
15	161'4	168'1	169'9	169'5	168'5	169'5	169'5	170'7	169'9	169'6	172'3	175'7
16	—	—	—	—	—	—	—	—	—	—	—	—
17	174'5	176'5	176'2	175'3	174'2	171'0	175'5	178'0	176'9	177'0	175'5	175'0
18	181'2	182'7	183'1	181'9	180'3	178'7	180'9	182'8	182'5	181'7	183'2	183'2
19	182'2	186'2	186'2	185'7	186'2	186'3	187'0	185'5	184'9	187'6	186'1	186'3
20	181'4	181'1	184'9	181'9	182'5	185'3	184'1	183'6	183'6	184'4	184'4	184'4
21	186'1	185'0	183'7 <sup>b</sup>	181'4	179'8	177'9	176'5	174'0	177'5	179'4	179'0	181'8
22	178'1	176'2	178'2	175'3	175'2	171'6	174'7	175'9	174'8	179'4	184'0	183'4
23	—	—	—	—	—	—	—	—	—	—	—	—
24	182'1	178'9	179'9	177'2	174'4	173'2	173'5	175'4	170'3	177'5	182'1	190'8
25	174'7	181'6	183'8	181'0	179'2	178'1	176'8	178'3	179'7	177'8	176'7	180'8
26	182'6	181'6	179'8	176'9	174'9	171'0	172'1	172'1	173'0	171'9	171'4	171'8
27	181'5	179'2	178'9	177'7	175'3	172'7	169'5	169'1	174'5	179'3	183'7	199'6
28	176'2	178'3	175'9	174'7	174'4	173'3	175'3	177'4	176'9	174'2	189'3	188'8
29	175'0	171'7	170'5	169'2	169'0	167'0	168'6	170'9	170'6	172'2	176'7	175'4
30	—	—	—	—	—	—	—	—	—	—	—	—
31	171'9	171'0	168'0	166'8	166'7	165'2	161'7	163'8	163'6	163'7	164'8	162'3
Hourly Means	173'85	174'31	173'88	173'15	172'39	171'93	171'94	172'33	172'76	174'42	175'28	176'12

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
	1	2	3	4	5	6	7	8	9	10	11	12
	72'2	73'3	73'5	73'7	74'4	74'9	75'1	75'0	75'5	76'1	76'0	76'3
	—	—	—	—	—	—	—	—	—	—	—	—
	71'3	71'5	72'0	72'5	73'0	73'7	74'7	75'3	76'0	77'0	77'0	77'2
	73'0	73'5	74'0	74'3	75'0	76'0	76'5	77'5	78'0	79'0	79'5	80'0
	76'3	76'5	77'0	77'7	78'7	80'3	80'2	80'5	81'0	81'6	82'0	82'2
	78'2	78'1	78'0	78'5	79'7	80'3	80'6	80'7	80'8	81'0	81'4	81'4
	76'5	76'0	76'3	76'5	77'5	77'5	78'3	79'0	79'3	79'5	80'0	80'4
	75'5	75'2	76'0	74'5	74'3	74'5	74'7	75'5	75'5	75'8	75'7	75'7
	—	—	—	—	—	—	—	—	—	—	—	—
	72'1	71'9	71'6	71'7	72'6	73'3	74'0	74'2	74'3	74'8	75'5	75'7
	69'5	70'0	70'2	70'5	71'3	72'0	72'8	73'0	73'2	73'5	74'0	74'2
	70'0	70'3	70'3	70'8	72'3	73'0	73'7	74'3	74'8	75'5	76'2	76'3
	74'0	74'0	74'3	74'3	75'0	76'0	76'5	77'1	77'5	77'0	77'3	77'7
	73'5	73'5	74'0	74'9	75'2	76'1	76'2	76'5	76'7	77'0	77'3	77'5
	73'0	73'6	73'7	74'3	75'0	76'0	76'5	77'0	77'2	78'0	78'5	78'5
	—	—	—	—	—	—	—	—	—	—	—	—
	71'5	71'6	71'6	72'3	73'0	73'5	73'7	73'7	73'7	74'0	74'2	74'2
	68'3	68'3	68'5	68'7	69'2	69'5	69'4	69'2	69'3	69'5	69'8	70'0
	65'7	66'0	66'3	66'3	66'5	67'0	67'3	67'5	68'0	68'4	68'3	68'5
	67'5	67'3	67'0	66'7	66'8	67'0	67'0	67'0	67'5	67'6	68'0	68'3
	67'0	67'3	68'0	68'2	69'0	70'0	70'5	70'6	71'0	72'0	72'2	72'7
	70'6	70'4	70'3	70'2	70'2	70'7	71'0	71'2	71'3	71'7	71'7	71'7
	—	—	—	—	—	—	—	—	—	—	—	—
	68'5	68'7	68'8	69'4	70'5	70'8	71'1	71'1	72'4	72'5	71'7	71'6
	66'7	67'4	68'2	69'0	69'7	70'0	70'5	71'0	71'3	72'0	72'3	72'8
	69'5	69'5	70'5	70'7	71'0	71'6	72'0	72'5	73'0	73'5	73'7	73'5
	69'5	69'8	70'3	71'1	71'8	73'0	73'5	74'0	74'2	75'0	76'0	74'5
	70'8	70'5	70'5	70'7	71'0	71'7	72'0	72'7	73'3	74'3	74'5	74'5
	71'7	71'9	72'3	72'7	73'5	74'4	75'1	75'2	74'8	74'7	74'4	74'0
	—	—	—	—	—	—	—	—	—	—	—	—
	72'3	72'5	73'5	74'0	74'6	75'0	75'5	76'0	76'5	77'0	77'5	77'5
Hourly Means	71'33	71'48	71'80	72'08	72'72	73'38	73'78	74'13	74'47	74'92	75'14	75'27

\* Fourteen minutes late.

\* Five minutes late.

1'64.

0 <sup>h</sup> .	11 <sup>h</sup> .
5'9	177'8
0'0	170'7
2'3	162'0
1'7	157'5
9'3	161'3
9'2	167'9
5'8	171'0
3'4	173'4
3'1	173'5
9'7	182'6
7'2	166'0
1'1	173'1
2'3	175'7
5'5	175'0
3'2	183'2
6'4	185'3
4'4	184'4
9'0	181'8
4'0	183'4
2'1	160'8
9'7	180'8
1'4	171'8
3'7	169'6
9'3	188'8
5'7	175'4
4'8	162'3
5'28	176'12

VERTICAL FORCE.													Daily and Monthly Means.
One Scale Division = .000067 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.													
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .		
Sc. Div. 178'2	Sc. Div. 173'6	Sc. Div. 172'6	Sc. Div. 170'9	Sc. Div. 171'5	Sc. Div. 171'9	Sc. Div. 177'8	Sc. Div. 156'1	Sc. Div. 161'0	Sc. Div. 161'6	Sc. Div. 161'9	Sc. Div. 172'9	Sc. Div. 170'41	
170'9	174'8	169'3	166'2	168'0	168'0	169'4	165'2	169'1	170'4	169'7	168'9	170'45	
163'5	160'3	161'3	162'4	160'3	161'9	162'7	162'5	162'5	162'5	163'6	167'0	164'49	
160'2	156'7	158'7	158'6	158'6	158'6	159'0	159'6	157'8	157'8	158'9	159'0	160'67	
159'9	168'1	159'0	140'3	144'8	91'9	151'4	152'5	150'6	80'0	106'4	143'8	147'42	
165'5	167'5	160'4	161'7	139'9	149'6	144'6	90'8	128'7	150'5	140'4	150'8	154'40	
170'8	170'4	169'4	170'5	160'3	165'8	—	—	—	—	—	—	166'85	
—	—	—	—	—	—	145'6	162'7	161'1	165'5	163'6	169'0	169'0	
172'0	176'6	177'3 <sup>b</sup>	176'3	173'7	160'2	161'8	162'0	169'9	169'6	177'8	180'7	172'73	
170'1	170'6	175'2	169'1	169'3	175'0	176'1	161'0	168'7	175'5	179'3	179'8	174'56	
177'8	170'5	171'3	171'3	168'4	166'7	155'4	160'8	154'9	147'7	145'3	162'0	170'29	
166'0	166'0	166'5	167'0	167'0	152'5	146'4	129'3	162'6	162'6	165'3	170'8	162'89	
169'7	167'8	169'8	161'8	147'8	164'6	136'7	151'3	140'0	149'3	162'9	161'3	163'73	
171'4	167'9	169'4	163'1	163'6	134'3	—	—	—	—	—	—	163'36	
—	—	—	—	—	—	144'7	136'1	158'7	158'9	151'0	164'0	163'0	
175'9	173'0	174'7	170'0	176'2	176'6	175'0	175'0	178'7	180'1	180'1	179'8	175'99	
182'3	183'2	185'0	181'0	183'3	177'0	183'1	181'0	182'4	182'4	183'3	185'0	182'41	
185'3	183'8	181'2	181'8	185'2	181'6	183'8	173'8	178'4	183'7	182'9	184'7	184'36	
184'4	183'7	183'8	183'4	184'6	183'9	183'9	181'3	183'5	182'5	176'9	184'7	183'76	
179'1	179'1	178'0	175'7	174'5	171'0	172'7	168'0	167'9	172'7	176'3	178'2	177'47	
180'4	181'6	180'0	179'1	179'1	—	—	—	—	—	—	—	178'76	
—	—	—	—	—	—	178'3	179'4	180'1	180'2	181'4	181'7	178'0	
186'2	186'5	181'6	171'1	187'0	183'2	171'7	176'2	176'2	178'3	179'6	177'9	179'03	
178'9	179'2	178'5	181'5	182'8	176'7	175'0	170'2	177'9	177'6	170'9	174'9	178'15	
171'5	171'8	172'4	175'3	169'6	169'3	171'3	169'9	173'4	169'6	173'1	173'1	173'43	
193'3	176'7	173'1	173'0	173'5	171'6	164'8	168'5	168'5	172'3	172'4	176'4	176'09	
176'2	171'1	170'0	155'7	155'6	167'9	169'7	162'5	162'9	168'6	167'7	166'8	172'06	
176'9	182'7	180'7	179'9	177'6	172'1	—	—	—	—	—	—	172'12	
—	—	—	—	—	—	163'9	161'7	165'5	167'8	170'4	171'9	165'83	
163'5	165'2	161'8	162'4	161'8	165'1	165'6	167'8	166'9	166'8	168'8	168'6	—	
174'23	173'40	172'58	169'93	167'62	165'47	161'25	161'32	165'71	165'15	166'77	171'30	170'84	

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

76'3	76'2	75'7	75'5	75'3	75'3	—	—	—	—	—	—	—	74'51
76'6	76'8	76'6	76'5	76'4	76'1	75'5	75'5	74'7	74'5	73'7	73'3	73'3	74'89
80'2	80'7	80'0	79'5	79'3	79'2	78'7	78'5	78'4	78'0	77'2	76'5	76'5	77'60
82'3	82'5	82'3	82'0	81'8	81'5	81'0	81'0	80'6	80'2	79'8	79'2	79'2	80'34
81'4	81'5	81'4	81'2	82'5	81'8	81'0	80'7	78'8	79'5	79'5	79'0	79'0	80'29
80'4	80'3	79'7	79'5	79'5	79'0	78'7	78'5	79'0	77'9	76'5	76'2	76'2	78'42
75'6	75'4	76'0	75'7	75'5	75'2	—	—	—	—	—	—	—	74'73
—	—	—	—	—	—	73'3	73'5	73'2	72'7	72'5	72'0	72'0	74'73
75'7	75'5	74'5	73'7	73'5	72'7	72'5	72'0	71'2	71'0	70'1	69'6	69'6	73'07
74'3	71'5	73'7	73'1	73'2	72'3	72'8	71'3	71'2	71'0	70'6	70'3	70'3	72'19
76'5	76'0	76'4	76'4	76'3	75'9	75'5	75'2	74'7	74'7	74'7	74'3	74'3	74'34
77'8	78'0	77'8	78'0	78'2	78'0	77'2	76'8	76'1	75'5	75'2	74'5	74'5	76'41
77'6	77'5	77'3	78'5	78'0	76'3	76'1	75'7	75'2	74'7	74'5	73'6	73'6	75'97
78'7	79'0	78'8	78'5	78'5	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	73'0	72'8	72'5	72'2	71'7	71'5	71'5	75'71
74'3	74'0	73'6	73'0	72'4	71'5	71'1	70'8	70'4	70'0	69'6	69'2	69'2	72'37
70'0	69'8	69'6	69'5	69'3	68'6	68'2	67'8	67'6	67'5	66'9	66'5	66'5	68'79
68'5	68'5	68'5	68'2	68'3	68'5	68'3	68'0	67'6	67'7	67'9	67'8	67'8	67'65
68'4	68'2	68'2	68'2	68'3	68'3	68'0	68'0	67'6	67'6	67'5	67'1	67'6	67'66
72'7	72'7	72'7	72'6	72'5	72'5	72'5	71'9	71'4	71'2	71'2	71'2	71'2	70'98
71'7	71'7	71'3	71'3	71'1	71'0	—	—	—	—	—	—	—	70'82
—	—	—	—	—	—	70'8	70'7	70'5	70'0	69'5	69'2	69'2	70'82
72'0	72'3	72'2	71'8	71'6	71'0	70'2	69'5	69'3	69'0	68'5	67'5	67'5	70'50
72'6	73'0	73'0	72'7	72'2	72'2	72'5	71'3	71'2	70'7	70'5	70'0	70'0	70'95
73'5	73'7	73'3	73'5	72'7	72'1	71'7	71'5	71'1	70'7	70'5	70'2	70'2	71'90
74'0	74'5	74'2	74'4	74'1	73'9	72'5	71'9	71'7	71'6	71'5	71'5	71'5	72'83
74'7	74'8	76'1	76'0	75'5	75'2	75'0	74'9	74'7	73'9	73'8	73'1	73'1	73'51
73'8	73'5	73'5	73'4	73'0	72'8	—	—	—	—	—	—	—	73'57
—	—	—	—	—	—	74'4	74'0	73'3	73'3	73'3	72'8	72'8	73'57
77'5	77'3	77'2	77'0	76'7	76'2	76'0	75'7	75'4	74'8	74'6	74'4	74'4	75'61
75'29	75'30	75'14	75'00	74'83	74'45	73'88	73'51	73'11	72'80	72'44	72'04	73'68	

\* Ten minutes late.

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.													
Mean Götting- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
SEPTEMBER.	1	169'1	165'5	166'5	165'7	164'0	161'1	160'5	160'5	161'1	161'1	161'1	
	2	165'9	165'9	165'0	164'1	160'9	159'7	159'5	159'2	159'7	159'6	158'0	
	3	163'6	163'6	162'8	162'7	162'0	162'5	162'4	163'4	165'9	165'3	165'5	
	4	142'5	141'7	149'2	156'2	161'9	161'1	166'9	167'3	168'2	168'6	169'7	
	5	153'1	152'4	154'3	157'0	162'5	167'5	169'3	192'5	180'5	193'6	182'4	
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	170'4	168'1	166'1	164'3	161'5	163'5	161'5	161'5	161'2	159'8	159'8	159'0
	8	155'4	156'1	157'7	157'5	161'8	168'8	176'4	178'9	186'5	189'0	177'3	173'1
	9	176'9	179'0	178'1	177'3	174'7	178'8	180'8	181'2	183'2	186'4	185'4	184'4
	10	183'6	182'1	182'1	180'5	178'3	179'2	178'0	179'7	182'7	184'0	181'6	184'8
	11	139'2	156'5	159'8	168'1	174'6	173'6	179'8	184'6	179'3	178'4	180'9	177'8
	12	164'9	169'2	167'0	165'7	169'8	167'0	168'4	169'1	171'6	169'7	176'1	171'7
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	164'3	163'4	164'2	166'3	166'3	166'3	167'8	168'6	166'7	165'3	165'9	166'4
	15	165'0	165'0	166'8	167'2	169'6	170'3	170'3	174'4	176'6	177'7	176'6	177'6
	16	183'4	184'1	182'9	180'4	179'1	178'7	179'6	180'2	180'9	181'4	180'1	180'1
	17	176'4	178'1	178'6	179'5	181'0	181'2	182'0	183'3	181'4	185'4	188'0	187'2
	18	184'6	184'2	185'3	181'4	183'7	183'3	182'4	181'7	182'7	182'2	181'5	180'3
	19	186'6	186'1	186'1	183'8	182'9	181'9	181'9	181'7	181'9	183'8	181'7	180'0
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	183'9	182'1	182'0	182'5	182'8	182'8	184'4	188'3	189'9	196'6	189'9	187'2
	22	114'6	134'8	147'2	172'8	194'2	198'9	212'8	236'5	227'7	222'6	213'2	213'2
	23	193'0	194'9	193'3	191'8	189'9	188'4	186'4	185'3	187'7	184'4	181'4	185'0
	24	175'8	178'9	177'5	177'4	177'6	180'0	178'8	182'3	183'7	183'7	181'1	182'4
	25	179'1	187'3	187'7	185'5	188'0	187'4	189'5	191'2	188'6	188'6	189'1	188'7
	26	187'5	189'3	190'9	188'8	189'6	189'3	188'3	187'4	190'2	189'6	188'5	190'6
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	196'1	197'1	196'6	195'4	191'0	193'5	194'4	196'4	196'8	194'5	193'5	191'5
	29	192'4	192'4	192'3	190'6	188'2	185'4	181'8	181'9	181'8	185'0	184'4	184'4
	30	186'3	187'0	186'0	182'5	182'5	180'6	180'2	180'2	180'1	181'4	182'5	182'7
Hourly Means	171'29	173'38	174'08	174'96	176'28	176'68	178'04	180'76	181'22	181'65	180'52	179'12	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
SEPTEMBER.	1	73'7	74'0	74'3	75'0	75'7	76'3	77'0	77'6	78'3	78'5	79'0	
	2	75'5	75'9	75'7	76'0	76'5	77'3	77'8	78'5	79'0	79'3	79'5	
	3	76'8	76'6	76'4	76'2	76'3	76'5	76'5	76'5	76'5	76'5	76'7	
	4	74'5	75'0	75'2	75'4	75'3	75'9	76'1	76'2	76'5	76'9	77'0	
	5	75'5	75'7	76'0	76'4	77'2	77'2	77'4	77'1	77'4	77'5	77'7	
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	74'5	75'0	75'5	76'5	77'0	77'5	78'0	78'8	79'5	80'0	80'3	80'3
	8	75'0	74'8	75'5	75'5	75'5	75'5	75'5	75'6	75'7	75'4	75'0	74'3
	9	67'5	67'5	68'0	68'1	68'7	68'7	68'7	68'5	68'5	68'6	68'7	68'6
	10	66'8	66'5	66'9	67'5	67'5	68'5	68'6	68'7	68'2	69'0	69'3	69'5
	11	68'4	68'7	69'0	69'7	70'5	71'2	71'7	72'3	73'0	73'6	73'7	74'0
	12	73'2	73'3	74'2	74'9	75'2	75'9	76'0	75'8	75'4	75'3	75'0	75'2
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	74'0	74'0	74'3	74'5	75'5	76'6	77'0	77'3	78'0	78'5	78'5	78'5
	15	73'1	72'5	72'5	72'5	72'3	72'3	71'7	71'5	71'5	71'7	71'5	71'7
	16	65'5	65'5	66'0	66'6	67'3	67'6	67'6	67'6	67'8	68'3	68'5	68'4
	17	65'7	65'5	65'3	65'0	65'0	65'5	65'5	65'5	65'5	65'6	65'6	65'5
	18	64'2	63'9	63'7	64'4	65'1	65'6	66'0	66'5	66'6	67'3	67'5	67'7
	19	63'7	64'0	64'6	65'0	65'7	66'5	66'8	67'7	68'5	69'5	69'5	69'8
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	65'5	65'1	64'6	64'4	64'5	64'3	64'2	64'6	64'7	65'2	65'4	65'5
	22	66'0	64'8	63'7	63'4	63'5	63'7	64'0	61'0	64'5	65'4	65'7	65'6
	23	61'8	61'8	62'6	63'1	63'6	64'6	65'2	66'1	66'6	67'3	67'9	68'5
	24	69'3	68'2	68'0	67'7	67'7	67'7	68'1	68'0	68'0	67'6	67'6	67'5
	25	63'7	63'0	63'0	62'5	62'5	62'3	62'3	62'0	62'0	62'3	62'5	62'8
	26	60'2	60'3	60'3	60'7	61'2	61'8	62'0	62'5	62'4	62'5	62'7	62'7
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	56'9	56'7	57'0	57'2	58'0	58'5	58'9	59'3	59'4	60'0	60'5	60'6
	29	60'3	60'5	60'9	61'0	61'6	62'7	63'4	63'6	64'0	64'5	64'5	64'5
	30	62'5	62'9	63'7	64'6	64'6	65'4	65'6	65'7	66'5	67'0	67'3	67'3
Hourly Means	68'22	68'14	68'34	68'61	68'98	69'44	69'68	69'90	70'15	70'51	70'65	70'69	

\* Forty minutes late.

\* Thirteen minutes late.

VERTICAL FORCE.

One Scale Division = 0.00066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

		12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
h.	m.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	100.9	160.8	161.7	161.9	161.8	164.0	163.9	163.9	163.2	162.6	161.1	162.6	161.1	163.11
1	157.1	157.1	157.3	159.2	159.4	159.5	160.7	160.2	160.1	159.7	159.0	163.1	163.6	160.52
2	164.2	164.9	164.9	164.7	164.7	164.7	164.7	143.0	164.8	151.2	129.8	144.2	159.7	160.22
3	172.6	172.5	172.6	173.5	168.4	165.3	165.6	162.5	142.6	140.4	139.7	140.6	143.6	159.01
4	174.3	175.5	167.8	162.8	151.2	159.2	164.2	—	—	—	—	—	—	167.75
5	—	—	—	—	—	—	—	166.5	165.5	167.1	168.2	167.1	170.4	—
6	159.0	159.1	159.6	159.2	159.0	161.9	161.6	159.1	150.7	152.2	149.1	154.5	153.6	160.01
7	173.1	171.4	171.4	174.0	173.3	173.4	170.6	174.0	174.9	174.9	175.0	176.5	174.6	171.77
8	184.4	183.1	181.9	182.4	182.3	182.3	182.3	182.3	183.7	182.8	182.2	182.2	183.5	181.55
9	184.8	184.8	181.7	180.4	—	179.6	180.0	180.0	178.6	169.8	159.9	158.5	174.0	178.69
0	177.8	176.2	170.7	167.3	172.8	158.9	163.1	164.3	165.5	153.0	133.5	156.5	168.8	166.80
1	171.7	171.6	168.9	168.4	166.2	166.7	167.7	—	—	—	—	—	—	164.89
2	166.4	165.8	165.8	166.5	163.5	156.8	159.5	126.6	153.9	154.6	159.1	145.2	165.7	161.44
3	177.6	175.6	175.2	175.5	175.5	180.9	177.0	176.9	179.6	179.6	180.9	180.9	181.6	174.85
4	180.1	180.3	180.3	180.1	182.3	182.3	178.7	176.4	181.1	181.0	179.9	178.6	173.7	180.23
5	187.2	187.2	187.7	185.6	185.6	185.5	185.7	185.6	183.2	182.7	184.4	184.0	183.87	—
6	180.3	180.3	180.3	181.7	181.5	180.3	181.4	182.7	184.2	184.3	185.2	179.6	180.7	182.44
7	180.0	178.9	176.8	176.8	178.0	178.8	177.7	—	—	—	—	—	—	180.22
8	187.2	187.7	189.6	204.9	203.7	189.6	191.5	200.0	167.5	182.6	151.2	131.2	129.3	182.09
9	213.2	210.3	196.4	196.9	192.4	188.8	183.3	168.6	186.3	181.5	181.0	180.6	191.8	190.38
0	185.0	190.2	184.2	182.1	180.8	185.7	180.6	159.1	178.8	177.2	180.2	175.4	175.6	184.77
1	182.4	182.7	181.5	180.7	180.1	180.6	181.4	181.4	182.9	184.5	183.5	182.7	179.1	180.93
2	188.7	189.7	189.7	190.4	189.4	181.0	186.1	180.7	181.8	191.8	178.4	169.4	185.4	185.78
3	190.6	189.3	189.1	186.6	186.6	186.6	185.6	—	—	—	—	—	—	189.38
4	191.5	191.5	192.2	192.1	192.2	191.9	192.5	192.0	192.2	192.4	192.2	192.3	192.0	193.55
5	184.4	184.4	184.5	184.5	183.8	184.5	186.0	185.9	186.7	187.4	187.1	185.9	185.0	186.51
6	182.7	180.5	184.5	184.4	186.6	183.4	182.1	183.0	176.3	177.0	180.3	182.0	181.3	182.22
7	179.12	178.90	178.05	177.72	176.84	176.01	175.95	173.24	173.05	171.77	169.11	169.55	172.98	175.88

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

79.0	78.8	78.5	78.5	78.1	77.8	76.5	77.0	76.8	76.7	76.7	76.7	76.7	76.7	77.06
79.5	79.7	79.5	79.0	78.8	78.5	78.3	78.1	77.6	77.2	77.2	77.3	77.3	77.9	77.97
76.0	76.0	76.2	76.0	75.5	75.3	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.8	76.03
76.7	76.5	76.5	76.5	76.5	76.5	76.1	76.3	76.1	76.2	76.2	76.0	76.0	76.0	76.12
78.0	78.5	78.5	78.2	78.2	77.0	—	—	—	—	—	—	—	—	76.70
80.0	80.5	80.0	80.0	79.3	79.0	78.4	77.6	77.3	76.3	76.3	76.0	75.8	75.8	78.05
73.7	73.7	73.3	72.6	72.0	71.0	71.0	70.0	69.4	69.0	68.5	68.5	68.1	68.1	73.15
68.6	68.5	68.3	68.3	68.2	67.8	67.6	67.3	67.1	67.0	67.0	67.0	66.7	66.7	68.02
69.5	69.6	69.7	—	69.5	69.4	69.0	69.0	69.0	69.0	68.7	68.5	68.5	68.61	—
74.0	74.5	73.3	74.0	74.2	74.2	73.7	73.5	73.2	73.1	72.5	72.5	72.5	72.5	72.45
75.0	75.5	75.2	74.7	74.5	74.3	—	—	—	—	—	—	—	—	75.03
78.5	78.7	78.8	78.6	78.6	78.4	77.7	77.0	76.3	75.5	75.5	75.5	75.5	75.5	76.82
71.7	71.0	70.6	70.3	70.0	69.5	69.1	68.8	68.5	68.0	67.3	67.4	67.4	67.4	70.71
68.4	68.1	67.7	68.0	67.8	67.5	67.4	67.0	66.6	66.6	66.0	65.7	65.7	65.7	67.23
65.5	65.0	65.6	65.5	65.0	65.0	64.7	64.5	64.5	64.5	64.4	64.0	64.0	64.0	65.18
67.7	67.5	67.7	67.4	67.2	67.0	67.0	65.5	65.4	65.0	64.7	64.4	64.4	64.4	66.04
69.8	70.0	70.2	69.5	69.4	69.0	—	—	—	—	—	—	—	—	67.70
63.5	65.5	65.2	64.8	64.6	65.0	64.8	65.0	64.8	64.8	64.5	63.8	66.4	66.4	64.91
67.6	65.6	65.4	65.5	65.0	64.8	64.5	64.5	64.0	63.7	63.5	63.3	62.6	62.6	64.45
68.5	68.6	70.0	70.3	70.5	70.0	70.5	70.0	69.7	70.1	70.0	69.8	69.5	69.5	67.42
67.5	67.0	66.5	66.5	66.3	66.0	66.0	65.2	65.0	64.7	64.5	64.5	64.5	64.5	66.91
62.8	62.0	61.7	61.5	61.5	61.3	61.2	61.0	60.7	60.6	60.6	60.5	60.5	60.5	61.88
62.7	62.5	62.5	62.5	62.5	62.4	62.2	—	—	—	—	—	—	—	60.98
60.6	61.0	61.2	60.8	60.8	61.0	60.6	60.4	60.5	60.8	60.5	60.4	60.5	60.5	59.65
64.5	64.6	64.7	64.6	64.6	64.5	63.8	63.7	63.5	63.2	63.0	63.2	62.9	62.9	63.24
67.3	67.3	66.8	66.8	66.8	66.5	66.4	66.2	65.5	65.5	65.3	64.9	64.6	64.6	65.66
65	70.69	70.61	70.52	70.40	70.17	69.90	69.48	69.18	69.04	68.77	68.51	68.36	68.36	69.54

\* Four minutes late.

VERTICAL FORCE.													
One Scale Division = 0.00066 parts of the V. F. Increase, in Scale Division, corresponding to 1° decrease of Temperature, 1.64.													
Mean (Göttingen Time.)	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
OCTOBER.	1	183.2	184.7	185.2	189.5	186.5	186.7	186.3	187.4	181.9	187.5	189.8	189.8
	2	184.7	184.7	189.0	191.6	191.6	191.0	193.1	198.3	198.3	205.5	204.4	205.5
	3	198.4	199.2	198.9	196.4	194.7	194.5	195.7	191.7	193.8	192.3	191.3	191.2
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	197.4	198.7	197.7	196.3	195.2	192.1	190.4	190.3	189.9	189.6	188.9	187.5
	6	192.1	192.0	192.1	189.7	190.4	190.4	189.5	190.9	190.3	191.8	190.8	190.5
	7	189.3	189.3	190.9	186.9	181.9	184.9	184.2	187.5	193.0	191.4	190.9	190.1
	8	159.3	134.7	140.3	172.6	182.9	183.4	188.5	193.8	186.8	186.3	186.3	187.7
	9	186.7	186.7	185.4	184.3	184.5	181.5	187.0	185.3	186.7	186.7	188.2	188.9
	10	174.4	176.7	181.8	184.9	191.6	195.4	198.4	197.2	198.0	196.7	195.7	195.0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	195.5	193.2	193.4	193.2	191.7	191.5	191.5	193.2	194.9	190.9	191.8	190.7
	13	190.7	190.5	191.6	191.2	192.3	192.0	191.6	195.5	196.9	196.7	198.4	197.8
	14	197.6	198.4	197.7	196.4	195.3	195.5	197.3	196.9	196.9	196.9	196.0	196.2
	15	198.7	197.7	200.0	196.6	195.7	195.6	196.8	198.4	197.9	196.2	194.7	194.0
	16	197.6	198.0	199.1	199.5	199.0	198.5	197.6	198.8	197.4	198.1	196.2	195.1
	17	197.7	198.8	201.2	202.1	201.9	201.1	200.6	200.6	202.4	202.3	201.1	198.3
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	209.5	209.5	207.4	208.3	206.1	204.0	205.6	205.2	204.4	205.4	206.5	217.5
	20	205.8	204.7	204.7	201.0	201.5	201.3	201.5	201.3	202.6	202.6	204.0	206.6
	21	205.5	205.2	206.5	205.2	204.4	204.0	203.7	203.0	204.3	202.8	206.2	207.0
	22	197.7	200.4	200.9	202.5	202.7	201.8	201.8	202.6	207.2	208.7	208.8	210.5
	23	213.5	213.7	213.8	214.6	214.5	211.0	211.0	211.9	208.7	209.0	208.6	208.7
	24	208.8	208.8	208.7	207.0	204.2	203.6	203.6	203.2	204.7	204.8	199.6	204.4
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	209.0	208.5	208.5	209.2	207.4	206.3	205.1	203.3	203.6	201.7	200.1	201.3
	27	196.3	197.7	198.3	198.5	197.8	197.2	197.2	196.7	197.2	198.8	197.3	198.5
	28	201.4	204.2	200.9	202.2	202.8	201.5	202.1	202.1	202.5	200.5	200.5	201.7
	29	201.2	204.7	203.9	204.2	202.8	202.8	201.4	201.5	202.5	202.5	202.5	200.6
	30	203.0	200.9	202.8	202.1	204.5	204.5	204.2	204.2	204.8	205.3	205.6	206.2
	31	207.5	208.6	208.8	208.8	208.9	208.2	208.2	208.2	208.4	209.4	209.4	209.4
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	196.51	195.93	197.39	197.66	197.62	197.16	197.91	198.08	198.49	198.82	198.30	198.91	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
OCTOBER.	1	61.4	63.8	63.4	63.3	62.7	62.8	63.0	62.8	63.5	63.4	63.6	62.5
	2	59.0	55.8	58.6	58.6	58.5	58.5	59.0	59.1	59.2	59.3	59.5	60.0
	3	57.0	5.5	56.0	57.1	57.5	57.7	58.5	59.0	59.0	59.3	60.0	60.0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	57.0	57.0	57.8	57.6	57.6	58.7	59.6	60.1	60.6	61.5	62.0	62.5
	6	58.6	58.6	58.8	60.5	60.3	61.0	61.4	62.3	62.5	63.0	63.3	63.2
	7	60.8	60.9	61.5	62.5	63.5	61.0	64.5	65.1	65.5	65.7	66.0	66.5
	8	66.4	65.6	65.8	65.6	66.0	66.3	66.3	66.3	66.2	66.0	66.0	65.6
	9	64.0	64.0	64.0	64.3	65.3	66.0	66.3	66.6	66.1	65.6	65.0	64.3
	10	59.5	59.3	59.1	59.6	59.3	59.3	59.0	59.2	59.4	59.3	59.5	59.5
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	56.5	56.9	66.5	58.8	59.2	60.0	60.0	60.5	60.6	61.5	61.7	61.8
	13	61.0	60.8	60.6	60.5	60.2	60.3	60.3	60.0	59.6	59.2	59.0	58.7
	14	56.0	56.3	56.3	56.8	57.2	57.7	58.0	58.2	58.2	58.6	59.0	58.8
	15	57.0	57.0	57.0	57.8	58.2	58.2	58.2	58.3	58.2	58.7	59.1	59.0
	16	56.4	56.5	56.5	57.2	56.4	57.1	57.5	57.9	57.9	58.3	58.7	59.0
	17	56.7	56.2	55.7	55.2	55.0	55.2	55.3	55.4	55.4	55.3	55.4	55.2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	48.9	49.1	52.0	50.2	51.0	51.5	51.9	52.0	52.4	53.0	53.2	53.6
	20	53.1	53.0	52.7	52.6	53.2	53.5	54.2	54.4	54.4	54.5	54.5	54.3
	21	51.4	51.6	52.2	51.6	52.2	52.4	53.0	53.1	53.1	53.6	53.5	53.2
	22	55.7	55.0	53.3	53.4	53.3	53.8	53.2	53.0	52.6	52.4	52.3	52.2
	23	48.4	48.3	48.0	47.6	47.6	48.1	48.4	49.0	49.0	49.5	50.0	50.2
	24	50.1	50.2	50.2	50.6	51.6	52.0	52.0	52.6	52.8	53.4	53.8	54.2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	50.0	50.0	50.0	50.2	50.4	51.4	52.0	53.0	53.4	54.2	54.5	54.3
	27	57.0	56.8	57.0	56.2	56.2	57.0	57.2	57.3	57.4	57.8	57.6	57.2
	28	53.4	53.0	54.0	54.0	53.0	52.9	52.7	52.3	52.6	53.2	53.8	54.2
	29	52.2	52.0	51.5	51.6	52.1	52.4	53.1	53.3	53.7	54.0	54.0	54.4
	30	51.3	51.3	51.1	50.6	50.7	51.0	51.1	51.4	51.3	51.4	51.8	51.6
	31	49.2	49.0	49.0	49.0	48.7	48.5	48.7	48.4	48.2	48.2	48.2	48.4
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	55.96	55.80	56.24	56.04	56.18	56.57	56.83	57.06	57.14	57.40	57.59	57.57	

\* Twenty-five minutes late.

Three minutes late.

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.													
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
189'3	188'3	189'1	188'9	190'0	180'4	178'3	187'9	188'1	188'1	189'6	181'4	186'83	
214'3	221'4	202'5	184'7	187'9	190'0	184'4	176'8	176'8	194'7	192'6	192'4	194'26	
191'7	192'5	192'5	193'7	191'0	193'4	—	—	—	—	—	—	194'87	
—	—	—	—	—	—	195'8	196'1	196'4	196'6	198'1	198'1	191'03	
187'2	188'1	188'6	188'7	189'1	189'1	190'1	191'1	191'1	190'4	187'8	189'5	188'58	
187'2	189'2	188'2	188'4	187'8	185'6	183'9	186'9	186'5	186'3	182'4	182'8	179'38	
190'5	190'5	197'2	185'0	171'6	164'7	126'9	165'6	156'8	163'9	179'0	175'6	179'49	
190'5	190'2	189'3	184'8	180'5	180'8	172'9	166'1	177'1	181'5	185'9	185'6	182'38	
188'9	188'9	186'8	197'0	190'3	181'0	178'3	168'4	159'2	164'0	169'4	169'9	190'26	
195'0	191'1	188'3	187'8	190'3	190'4	—	—	—	—	—	—	191'69	
—	—	—	—	—	—	199'5	201'2	191'0	176'6	172'3	193'9	190'44	
151'4	191'1	191'1	189'8	191'1	191'1	190'2	189'0	191'3	191'7	188'5	190'4	195'46	
198'0	201'1	201'4	195'8	198'8	198'0	196'2	192'6	195'4	195'4	197'5	196'6	197'20	
198'6	198'7	195'9	196'6	196'6	196'7	196'9	198'4	198'4	199'2	198'3	197'5	196'41	
195'1	199'5	199'5	198'8	189'1	193'5	196'7	195'7	198'4	196'3	194'0	195'0	196'23	
195'1	194'9	191'4	192'1	193'8	193'8	193'7	192'9	196'0	197'5	196'9	196'5	202'80	
197'8	196'5	198'9	201'2	204'0	203'7	—	—	—	—	—	—	208'75	
—	—	—	—	—	—	209'8	206'5	209'3	211'2	207'6	206'5	204'13	
225'2	236'5	216'6	215'0	197'8	204'7	205'6	206'1	206'1	200'7	200'6	205'8	203'29	
204'0	204'3	204'8	204'8	204'9	204'9	204'9	204'9	204'9	206'3	205'3	205'5	206'43	
206'3	201'1	204'2	203'9	204'3	205'1	204'4	204'8	203'6	203'4	186'7	193'0	209'58	
211'8	210'7	210'7	205'4	206'8	210'1	210'0	208'0	207'3	203'2	204'7	208'5	205'40	
208'7	207'3	208'1	208'1	208'4	204'3	205'3	205'2	207'1	208'6	208'7	208'8	202'10	
203'1	206'1	205'6	198'9	204'9	205'4	—	—	—	—	—	—	197'70	
—	—	—	—	—	—	207'4	207'2	206'9	206'9	206'9	209'0	202'12	
201'5	209'5	198'9	199'5	199'5	198'9	198'6	199'6	198'9	198'1	196'3	196'2	202'44	
198'5	198'5	195'4	198'2	198'9	198'2	191'9	195'0	197'6	199'0	199'2	201'8	205'18	
201'8	202'6	204'2	203'2	202'3	202'2	201'1	202'1	202'1	200'3	200'6	202'9	208'79	
201'0	201'6	202'5	202'4	202'5	195'2	201'1	201'1	204'9	201'4	204'5	203'8	—	
206'9	206'9	208'5	210'2	208'6	208'7	205'5	200'1	201'5	206'2	206'2	207'0	—	
210'9	209'3	210'5	210'3	210'3	210'4	—	—	—	—	—	—	—	
—	—	—	—	—	—	208'8	208'4	208'0	207'0	205'7	206'6	—	
199'68	200'62	198'91	196'56	196'45	195'57	194'01	191'84	194'84	195'46	195'03	196'54	197'14	
TEMPERATURE OF THE VERTICAL FORCE MAGNET													
62'4	62'1	61'8	61'5	61'1	60'6	60'1	60'2	60'0	59'7	59'2	59'0	61'97	
60'0	60'0	59'8	60'3	60'0	59'2	58'8	58'6	58'4	58'0	57'7	57'0	59'00	
59'8	59'8	59'5	59'5	59'5	59'4	—	—	—	—	—	—	58'17	
—	—	—	—	—	—	56'7	57'0	57'2	57'2	57'0	56'8	60'22	
62'6	62'6	62'4	61'8	61'4	61'4	61'0	60'7	60'4	60'0	59'7	59'2	61'71	
63'2	63'0	62'8	62'7	62'7	62'7	62'5	62'0	61'8	61'7	61'5	61'0	65'18	
69'5	66'5	66'3	66'8	67'0	66'6	66'6	66'4	66'5	66'4	66'2	66'0	65'42	
65'5	65'5	65'1	65'0	64'9	64'7	64'6	64'6	64'5	64'5	64'5	64'6	63'69	
63'8	63'5	63'1	63'0	63'1	62'6	62'1	61'9	61'7	61'4	60'8	60'0	—	
59'8	60'0	60'0	59'7	59'0	58'9	—	—	—	—	—	—	58'84	
—	—	—	—	—	—	57'2	57'2	57'2	57'2	57'3	56'7	60'94	
61'8	62'0	62'0	61'9	61'7	61'5	61'5	61'5	61'5	61'2	61'0	61'0	58'63	
58'5	58'0	57'8	57'4	57'3	57'2	57'2	57'1	56'9	56'9	56'7	56'0	57'61	
58'3	58'2	58'1	58'0	57'6	57'4	57'1	57'4	57'3	57'3	57'5	57'4	57'79	
59'0	58'3	58'0	57'8	57'8	57'5	57'2	56'9	57'0	57'0	57'0	56'8	58'30	
59'2	59'2	59'5	59'8	60'0	59'8	59'7	59'5	59'0	58'5	58'2	57'3	53'57	
54'8	54'7	54'5	54'2	53'8	53'5	—	—	—	—	—	—	52'30	
—	—	—	—	—	—	49'2	49'0	49'0	49'2	49'0	48'7	53'28	
53'4	53'4	53'2	53'2	53'0	53'0	53'0	53'0	52'7	52'7	52'7	53'1	53'60	
54'2	54'0	53'6	53'1	53'0	52'7	52'4	52'7	52'5	52'2	52'2	51'8	51'76	
51'2	51'4	51'4	51'2	51'2	51'0	51'5	51'2	51'6	51'4	51'6	51'7	49'57	
51'7	51'4	51'2	51'0	50'8	50'3	50'2	49'5	49'2	49'2	49'2	48'4	—	
50'2	50'6	50'8	51'0	50'8	50'5	50'5	50'6	50'3	50'2	50'2	50'0	51'85	
54'0	53'8	53'6	53'2	53'2	53'0	—	—	—	—	—	—	53'79	
—	—	—	—	—	—	50'2	50'0	50'0	50'0	49'9	50'0	56'40	
54'5	54'6	55'2	55'3	55'3	55'4	55'5	55'8	56'2	56'3	56'6	56'8	53'02	
56'7	56'9	56'3	56'7	56'3	56'1	55'7	55'4	55'2	55'0	54'5	54'2	50'75	
54'0	53'8	53'6	53'0	53'0	52'9	52'4	52'4	52'2	52'0	52'0	52'2	—	
53'8	53'8	53'9	53'4	53'0	52'8	52'8	52'8	52'2	51'9	51'7	51'3	49'07	
51'0	51'4	51'2	51'0	50'6	50'3	50'2	49'8	49'7	49'5	49'4	49'2	—	
48'4	48'4	48'4	48'2	48'2	48'0	—	—	—	—	—	—	—	
—	—	—	—	—	—	50'0	50'2	50'4	51'0	51'3	51'6	—	
57'47	57'40	57'26	57'17	57'01	56'78	56'27	56'16	56'06	55'95	55'84	55'59	56'64	

10h.	11h.
Sc. Div.	Sc. Div.
189'8	189'8
205'6	205'6
191'2	191'2
—	—
187'5	187'5
190'5	190'5
190'9	190'9
187'7	187'7
188'9	188'9
195'7	195'7
—	—
190'7	190'7
197'8	197'8
196'0	196'0
194'7	194'0
195'1	195'1
191'1	198'3
—	—
217'5	217'5
206'6	206'6
207'0	207'0
208'5	208'5
209'0	209'0
204'4	204'4
—	—
201'3	201'3
198'5	198'5
201'7	201'7
200'6	200'6
206'2	206'2
209'4	209'4
—	—
198'91	198'91

VERTICAL FORCE.													
One Scale Division = .000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.													
Mean Göttingen Times.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
NOVEMBER.	2	206'5	206'2	202'7	200'3	200'5	199'9	201'5	200'5	202'8	201'1	206'8	203'9
	3	196'7	196'4	195'6	191'4	195'7	191'1	191'7	191'7	191'7	191'9	191'9	193'1
	4	191'8	195'6	193'9	193'7	193'9	193'9	191'4	191'9	191'9	191'9	191'7	193'7
	5	197'7	201'5	202'9	200'7	199'3	197'0	196'8	195'4	195'0	191'6	191'0	191'0
	6	203'6	203'6	203'6	203'2	200'0	198'6	197'9	199'0	196'8	198'8	198'8	195'9
	7	203'3	201'1	202'8	202'1	200'8	198'8	199'5	199'5	201'3	201'9	206'1	205'2
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	198'0	196'9	195'0	196'4	193'9	190'6	191'2	192'1	192'2	192'4	191'3	189'7
	10	188'4	189'0	189'4	190'4	189'0	185'5	185'5	184'1	185'3	185'3	185'3	186'7
	11	189'3	189'3	189'3	190'2	190'9	189'3	188'7	188'6	188'6	191'1	191'6	190'5
	12	192'7	192'7	191'3	194'6	191'9	192'9	191'8	192'9	193'7	198'7	192'7	192'9
	13	191'8	191'5	191'5	194'1	195'0	191'8	195'0	195'0	191'6	191'6	193'1	193'1
	14	193'7	195'1	196'0	196'1	196'3	195'6	195'9	195'6	195'9	195'8	195'8	196'8
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	196'6	196'3	196'1	195'0	193'7	192'4	192'9	191'6	191'5	191'5	191'5	195'0
	17	195'3	195'3	193'3	194'3	190'7	189'6	189'6	196'7	206'4	201'5	192'7	191'8
	18	191'6	196'1	195'9	191'9	193'7	192'1	190'2	197'6	190'7	190'5	191'9	190'5
	19	193'5	193'6	195'2	191'7	195'4	195'6	197'1	198'0	198'6	198'1	197'1	199'5
	20	201'7	201'1	201'1	205'8	202'7	201'2	201'0	201'0	202'8	202'7	201'1	205'6
	21	202'0	202'4	203'9	203'9	202'8	203'2	203'2	202'9	202'7	202'7	201'5	206'2
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	211'0	211'2	209'3	209'1	209'2	209'2	209'2	210'9	210'6	209'0	207'7	207'9
	24	201'9	201'6	201'7	202'9	203'8	200'0	201'4	201'7	201'7	201'7	201'7	201'9
	25	207'2	207'2	212'3	213'7	213'1	213'7	218'3	219'6	219'7	221'0	221'7	221'2
	26	219'6	219'2	215'5	218'8	220'0	219'7	221'2	221'2	225'7	226'7	230'8	231'4
	27	229'0	220'1	219'2	217'8	218'7	218'7	220'4	220'4	220'5	221'4	221'1	218'0
	28	201'0	202'4	200'5	200'0	202'2	202'8	203'1	205'5	204'1	204'7	203'8	203'9
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	213'8	212'5	211'8	210'7	212'7	212'6	212'7	213'6	215'6	214'5	214'5	214'7
	Hourly Means	200'59	200'96	200'87	200'67	200'37	199'52	199'85	200'51	201'55	201'56	201'09	201'28

TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
NOVEMBER.	2	51'6	51'9	52'2	52'2	52'7	53'3	53'6	51'2	51'4	55'0	55'4	55'6
	3	56'2	56'0	56'0	56'2	57'4	57'1	57'5	57'7	57'8	58'4	58'2	58'4
	4	56'7	56'5	56'0	57'3	57'3	57'3	57'6	58'0	58'2	58'2	58'2	58'0
	5	51'0	51'5	51'2	51'1	55'2	55'2	56'0	56'1	57'0	57'4	58'2	58'3
	6	52'5	52'2	52'2	52'2	52'6	52'7	53'4	53'8	51'2	51'7	55'0	55'3
	7	53'5	53'4	52'5	52'2	52'6	53'4	53'5	53'8	51'0	51'3	51'3	54'3
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	55'8	56'2	56'3	56'4	56'9	57'7	58'1	58'1	58'2	58'6	59'0	59'2
	10	59'4	59'4	59'0	59'2	59'1	60'0	60'2	60'5	60'5	60'6	60'6	60'6
	11	59'2	59'2	59'1	59'1	59'2	59'3	59'3	59'3	59'4	59'5	59'6	59'6
	12	58'2	57'6	57'3	57'2	56'8	56'6	56'7	57'0	57'0	57'2	57'3	57'3
	13	57'0	57'0	56'6	56'5	56'5	56'5	56'5	56'5	56'6	56'9	57'0	57'0
	14	56'0	56'2	56'0	55'4	55'5	55'6	55'6	56'0	55'6	56'0	55'9	56'3
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	51'5	51'7	54'7	54'2	54'6	55'3	55'5	55'5	55'7	56'2	56'1	56'0
	17	55'3	55'2	55'3	55'8	56'3	56'3	56'3	56'7	56'9	57'3	57'2	57'0
	18	57'3	57'2	56'8	56'6	57'2	58'0	58'4	59'2	59'3	59'4	59'1	59'0
	19	57'4	57'2	56'8	56'6	56'1	56'2	56'3	55'6	55'2	55'2	55'1	51'4
	20	51'2	51'0	50'8	50'4	51'1	51'4	51'5	51'2	52'0	52'2	52'0	53'0
	21	52'0	52'0	51'3	50'7	50'9	51'1	51'2	51'4	51'4	51'7	51'8	51'8
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	46'2	46'3	47'4	46'6	46'7	47'2	47'4	47'5	48'6	48'6	48'2	48'8
	24	49'6	49'8	49'3	49'0	49'4	50'0	50'3	50'4	50'4	50'4	50'4	50'3
	25	47'6	47'4	45'2	45'3	41'0	42'8	43'2	41'5	41'1	40'8	40'5	40'0
	26	39'4	39'5	40'2	39'4	39'4	39'8	40'0	40'0	40'0	39'9	39'8	39'8
	27	39'9	39'7	40'4	40'0	40'0	40'4	40'5	41'4	41'4	41'5	42'0	43'1
	28	49'3	49'2	50'5	50'5	49'5	49'4	49'8	49'4	50'0	50'6	51'2	51'0
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	43'0	43'0	43'2	43'0	43'4	43'6	43'6	43'6	43'4	43'3	43'5	43'4
	Hourly Means	52'51	52'45	52'37	52'26	52'43	52'65	52'88	52'99	53'13	53'36	53'42	53'50

12h.
203'4
193'1
193'7
195'7
196'8
201'4
—
189'7
186'7
190'0
191'7
193'1
196'8
—
193'9
195'7
192'3
199'5
208'5
206'3
—
207'8
205'8
221'2
238'1
216'2
205'3
—
214'4
—
201'60

12h.
55'8
59'0
58'3
57'5
55'3
51'4
—
59'5
60'5
59'5
57'3
57'3
56'3
—
56'4
57'0
58'6
51'7
52'7
51'6
—
48'7
50'2
39'8
49'4
41'6
51'0
—
43'3
—
53'34





VERTICAL FORCE.													
One Scale Division = .00065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
DECEMBER.	1	216.6	216.6	215.0	218.3	218.3	218.7	219.5	221.0	220.5	217.6	217.6	218.1
	2	213.7	214.0	214.0	213.7	212.5	209.0	209.7	209.3	208.0	206.8	205.8	204.6
	3	203.1	202.2	203.2	203.2	204.4	204.4	204.7	205.5	206.1	205.7	205.7	206.6
	4	210.0	210.0	208.0	208.8	208.9	210.3	210.8	211.8	211.3	210.3	211.0	211.0
	5	206.9	206.6	207.7	208.3	205.4	206.2	205.5	205.0	205.6	205.5	204.2	205.0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	213.5	213.3	212.4	210.7	210.4	210.0	209.3	209.9	210.3	210.1	209.1	208.1
	8	203.6	203.9	206.5	204.5	203.2	202.3	202.3	204.2	205.0	205.2	204.4	204.6
	9	206.0	205.4	207.3	207.0	205.9	205.7	205.7	205.4	206.7	207.0	209.0	210.3
	10	208.1	208.5	209.3	210.1	209.2	210.2	208.7	208.7	210.2	208.2	208.1	206.7
	11	207.7	208.7	209.6	208.9	205.2	205.2	207.3	210.3	211.5	211.5	211.5	211.3
	12	212.1	214.5	215.7	217.2	218.2	217.2	218.7	217.4	220.0	220.0	219.7	220.4
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	227.6	230.2	226.1	227.8	226.0	225.1	225.1	225.1	225.2	221.8	221.4	222.6
	15	227.0	227.9	222.3	222.3	224.8	224.8	222.9	222.9	222.9	221.2	221.4	220.4
	16	216.1	216.1	218.4	217.8	215.6	215.6	213.8	212.1	212.1	211.3	211.8	211.8
	17	214.2	214.2	214.2	213.2	212.1	209.8	208.6	208.6	210.4	209.6	209.0	209.2
	18	210.3	212.4	210.8	214.1	211.8	211.5	212.4	211.3	209.7	209.3	208.8	209.1
	19	207.6	207.4	210.8	209.3	207.8	206.6	207.7	207.7	207.7	207.0	207.0	208.2
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	216.0	216.1	214.1	213.7	213.7	213.7	213.7	213.0	212.6	210.6	210.9	210.9
	22	213.7	213.7	214.0	214.1	214.3	211.3	214.5	217.7	218.5	218.3	218.3	218.2
	23	215.2	215.7	215.9	213.1	213.4	214.5	214.5	217.9	216.0	214.9	219.6	218.4
	24	208.3	208.3	207.5	208.5	209.6	209.6	208.6	207.8	206.6	206.3	206.2	208.1
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	213.0	213.0	213.6	213.7	214.7	213.3	211.8	211.2	211.3	211.4	211.7	211.2
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	200.3	200.3	200.7	201.9	201.0	201.1	202.8	204.1	204.1	203.9	205.1	204.1
	29	205.1	205.7	208.0	208.0	208.1	207.5	209.9	210.1	210.1	209.8	209.1	208.5
	30	205.7	205.7	205.1	203.6	201.7	201.7	201.5	201.5	200.4	200.4	200.0	200.0
	31	198.4	198.9	198.6	200.7	200.7	200.0	200.0	199.1	199.1	197.9	196.2	198.6
Hourly Means	210.76	211.43	211.41	211.26	210.65	210.32	210.38	210.72	210.84	210.48	210.22	210.23	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
DECEMBER.	1	41.3	41.2	40.9	40.4	40.0	40.2	40.2	40.2	40.4	40.9	41.2	41.6
	2	43.4	43.5	43.5	43.6	44.1	45.4	45.5	46.0	46.4	47.4	47.6	48.7
	3	50.6	50.1	49.3	48.4	48.4	47.6	48.4	48.4	48.2	48.0	47.9	47.8
	4	44.4	44.4	44.7	44.4	44.7	45.0	45.2	45.0	45.2	45.6	46.2	46.4
	5	47.3	47.2	46.9	46.6	46.8	47.5	47.5	47.9	48.0	48.4	48.4	48.5
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	43.0	43.5	43.2	43.2	43.4	43.8	44.4	44.5	44.7	45.2	45.5	45.9
	8	48.7	48.8	48.1	48.2	48.5	49.1	48.7	48.6	48.4	48.6	48.6	48.5
	9	47.2	47.2	46.8	46.4	46.0	46.1	46.4	47.1	47.3	47.4	47.4	47.7
	10	45.6	45.6	45.1	44.5	44.5	45.2	45.8	46.0	46.5	47.3	47.8	48.0
	11	45.8	45.4	45.2	45.4	46.2	46.6	46.0	45.6	45.2	45.2	45.4	45.1
	12	43.0	42.6	41.8	41.2	40.5	40.5	40.4	40.4	40.0	40.0	40.0	40.0
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	32.0	32.3	32.6	33.1	33.2	33.4	33.8	34.1	34.8	35.2	35.9	36.4
	15	34.6	34.2	33.9	34.4	34.9	36.0	36.4	36.9	37.4	38.4	39.0	39.2
	16	38.0	38.0	37.4	37.4	38.0	38.7	39.1	39.7	39.9	40.2	40.4	40.4
	17	40.0	40.0	39.6	39.7	40.8	40.8	41.5	41.8	41.8	41.8	41.8	41.8
	18	39.7	39.0	39.1	38.4	38.1	39.0	39.4	39.7	40.7	41.2	41.2	41.6
	19	41.9	41.7	41.5	41.5	42.2	42.5	42.5	43.0	42.7	43.0	42.4	42.6
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	38.1	38.2	38.2	38.2	38.2	38.2	38.7	39.2	40.0	40.2	40.2	40.2
	22	40.0	40.2	39.4	39.1	37.1	36.1	35.6	34.9	34.9	35.3	35.8	36.3
	23	38.1	38.0	37.4	37.4	37.3	37.2	37.0	37.7	38.5	39.8	40.0	41.0
	24	42.2	42.2	42.9	42.2	41.7	42.4	43.4	43.7	44.2	44.4	44.5	44.4
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	39.6	39.9	39.4	38.7	39.4	40.0	40.1	40.6	40.6	40.7	40.4	41.0
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	46.6	46.4	46.1	45.8	45.8	46.1	45.7	45.4	45.4	45.4	45.2	45.0
	29	43.6	43.0	42.5	41.8	41.4	41.6	41.6	41.6	41.6	42.2	42.4	42.4
	30	43.6	43.8	44.2	44.2	44.2	45.0	45.5	45.9	46.4	46.8	46.8	47.3
	31	48.2	48.2	48.1	46.4	46.9	47.4	47.8	47.7	48.0	48.2	48.5	48.7
Hourly Means	42.56	42.48	42.23	41.95	42.04	42.38	42.58	42.77	42.97	43.34	43.48	43.70	

<sup>a</sup> Christmas Day.

**VERTICAL FORCE.**

One Scale Division = .000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
218'4	218'4	220'1	218'6	217'7	213'0	213'0	214'7	214'2	213'2	213'2	209'7	216'75
203'7	203'1	202'1	202'2	202'4	200'6	200'0	198'6	199'0	200'3	200'9	201'6	205'65
206'2	207'1	206'8	207'3	207'3	207'7	208'7	209'1	208'6	208'5	208'5	208'5	206'25
209'7	209'3	208'1	206'4	206'2	207'2	207'7	207'4	207'4	207'4	205'0	206'9	208'79
204'4	206'2	205'4	205'5	205'9	205'9	—	—	—	—	—	—	208'40
—	—	—	—	—	217'6	217'1	216'8	215'5	214'2	215'3	—	208'09
208'1	207'7	206'5	206'6	206'5	205'6	205'4	204'6	203'7	203'3	203'4	203'4	205'04
204'7	205'5	206'3	207'6	207'7	207'3	205'1	205'2	205'2	205'6	205'0	206'0	208'66
211'7	211'5	225'4	218'8	213'0	208'4	206'3	204'0	203'9	207'0	208'4	208'1	207'79
208'6	202'5	207'6	207'3	207'3	209'0	207'1	207'3	207'0	207'0	205'0	205'0	210'73
211'5	211'7	213'0	215'3	214'4	214'4	214'4	212'6	208'5	208'5	212'3	212'2	220'80
220'4	220'1	220'2	221'6	220'3	219'1	—	—	—	—	—	—	220'80
—	—	—	—	—	—	228'1	227'7	227'5	227'2	227'4	228'4	221'61
222'9	223'7	223'7	223'8	222'2	222'2	223'4	221'4	224'5	224'1	224'5	224'2	220'30
215'4	215'1	213'9	220'2	220'2	215'4	215'4	216'4	220'8	220'8	216'7	216'1	213'25
211'8	211'6	211'6	212'0	211'4	210'8	211'7	212'3	212'3	212'5	213'3	214'2	210'94
209'0	208'5	209'7	210'8	210'5	210'5	210'6	211'6	212'6	214'0	210'2	210'0	209'45
208'8	209'1	209'4	208'7	208'7	208'7	208'7	206'2	206'4	206'8	206'0	207'3	210'00
208'2	208'2	208'2	208'2	208'1	207'4	—	—	—	—	—	—	213'43
—	—	—	—	—	—	217'2	214'6	217'3	216'9	215'5	215'5	215'57
210'9	210'9	213'0	214'3	211'4	213'5	214'6	214'5	214'7	214'4	214'4	214'1	215'68
208'3	218'2	217'3	211'7	216'1	216'0	214'5	214'2	214'2	213'9	213'7	214'0	208'25
209'6	218'4	215'8	215'2	213'0	198'9	208'0	209'1	206'9	207'0	205'3	205'4	208'25
208'2	207'8	204'0	203'5	202'0	200'0	—	—	—	—	—	—	208'00
—	—	—	—	—	—	214'7	211'4	215'1	212'6	211'0	212'4	203'29
209'6	209'6	208'7	207'4	203'3	201'2	—	—	—	—	—	—	207'81
—	—	—	—	—	—	200'0	200'5	200'5	200'6	200'5	200'3	201'30
204'1	205'4	203'2	203'7	204'2	204'2	203'1	204'2	205'6	204'3	203'5	204'1	207'81
208'5	209'0	209'0	209'0	208'8	208'3	207'7	205'7	205'6	205'4	205'1	205'4	201'30
200'0	201'0	201'2	200'8	200'3	200'5	200'0	201'3	201'3	199'5	199'6	198'3	199'05
205'0	205'2	205'0	196'7	197'3	197'4	197'0	197'2	196'7	197'7	196'7	197'0	210'20
210'22	210'23	210'63	210'23	208'47	208'20	210'00	209'60	209'04	209'78	209'20	209'36	210'20

**TEMPERATURE OF THE VERTICAL FORCE MAGNET.**

41'6	41'2	41'2	42'0	42'0	42'2	42'2	42'3	42'3	42'6	43'3	43'4	41'45
49'3	49'7	50'0	50'2	50'2	50'6	51'0	51'6	51'4	51'2	51'0	50'9	48'01
47'8	47'4	47'2	47'0	46'7	46'5	46'2	45'6	45'4	45'2	45'1	45'0	47'42
46'3	46'3	46'7	47'1	47'2	46'9	46'9	46'7	46'5	46'7	47'0	47'2	45'95
48'4	48'3	48'2	48'0	47'9	47'7	—	—	—	—	—	—	46'19
—	—	—	—	—	—	40'4	40'9	41'3	41'6	42'3	42'7	45'85
46'2	46'4	46'6	47'1	47'3	47'6	47'7	47'6	47'8	48'4	48'7	48'8	48'32
48'6	48'6	48'4	48'0	48'0	47'6	48'0	47'2	47'8	48'0	48'0	47'4	47'05
47'8	48'0	47'8	47'6	47'6	47'5	47'5	47'2	46'7	46'1	46'2	45'9	46'39
47'6	47'5	47'4	47'4	47'2	46'6	46'4	46'4	46'3	46'2	46'2	46'3	44'69
44'7	44'4	44'3	44'0	44'0	43'6	43'4	43'6	43'4	43'4	43'4	43'2	38'51
40'0	39'8	40'0	39'7	40'0	40'2	—	—	—	—	—	—	31'89
—	—	—	—	—	—	32'3	32'5	32'4	32'6	32'3	32'1	37'46
36'3	36'1	35'9	36'0	36'5	36'4	36'0	35'8	35'6	35'4	35'4	35'2	39'62
39'4	39'3	39'1	39'3	39'2	39'3	38'8	38'7	38'3	38'1	37'2	37'0	39'22
40'5	40'5	40'5	40'7	40'7	40'5	40'2	40'0	40'0	40'0	40'0	40'0	40'70
41'6	41'6	41'3	41'1	41'0	40'2	40'0	39'9	39'7	39'5	39'9	39'6	41'03
41'7	41'9	42'1	42'4	42'4	42'3	42'4	42'6	42'6	42'4	42'4	42'4	41'27
43'0	43'0	43'2	43'0	43'0	42'8	—	—	—	—	—	—	38'11
—	—	—	—	—	—	36'6	37'2	37'3	37'8	38'1	38'1	39'45
40'4	39'9	40'0	40'0	40'2	40'0	39'7	39'7	39'8	39'8	39'8	39'9	37'55
37'0	37'6	38'0	38'1	37'9	38'1	38'3	38'2	38'2	38'2	38'4	38'4	40'21
41'6	41'5	40'8	41'4	42'0	42'4	42'2	42'2	42'9	42'6	43'0	43'0	42'72
41'4	41'6	45'2	46'0	46'2	46'4	—	—	—	—	—	—	42'10
—	—	—	—	—	—	39'1	39'1	38'9	39'0	39'1	39'2	42'10
41'2	41'5	42'0	42'8	43'4	44'2	—	—	—	—	—	—	41'70
—	—	—	—	—	—	45'4	45'6	45'7	45'5	45'7	47'0	41'70
41'9	44'0	43'6	43'3	43'4	43'4	43'1	43'1	43'5	43'6	43'8	43'7	42'45
42'2	42'2	42'2	42'3	42'4	42'5	42'6	43'0	43'2	43'4	43'6	43'6	46'27
47'0	46'4	46'4	46'6	46'6	46'6	47'0	47'4	47'6	47'6	47'6	47'8	48'32
49'3	49'2	49'4	49'3	48'9	48'8	48'6	48'4	48'4	48'4	48'4	48'4	43'02
43'48	43'70	43'73	43'75	43'86	43'92	43'88	42'78	42'84	42'81	42'83	42'92	43'02

VERTICAL FORCE.													12h.
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.													
Mean (Götting- gen Therm.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
JANUARY.	1	197.0	197.0	196.5	197.4	196.7	197.1	198.6	198.6	198.5	199.0	198.6	199.1
	2	197.8	198.4	199.3	199.3	199.3	198.9	200.0	200.0	200.0	200.0	200.0	202.0
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	207.5	208.0	207.5	205.4	205.9	206.6	206.2	206.2	205.5	205.3	203.6	201.2
	5	199.7	199.1	199.5	200.0	198.4	199.7	203.9	203.9	200.6	200.0	200.6	200.5
	6	203.2	203.2	201.3	201.4	200.6	201.7	201.5	202.6	202.0	201.0	199.8	198.5
	7	200.0	200.0	200.7	200.7	200.5	201.7	201.7	201.9	202.3	195.7	196.3	203.7
	8	212.0	215.7	216.6	215.0	215.6	218.7	220.0	222.5	221.0	220.0	219.2	220.3
	9	223.4	223.4	220.0	220.0	220.0	220.0	220.6	217.7	217.4	218.5	218.8	219.3
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	225.5	227.4	228.8	226.0	225.3	225.2	227.3	228.2	228.2	229.1	229.3	229.5
	12	225.0	225.8	223	223.2	220.6	219.5	219.5	219.5	220.1	219.2	217.4	215.6
	13	214.7	214.7	215.0	213.6	213.6	211.4	210.0	211.2	211.1	208.4	208.5	207.5
	14	200.3	200.6	200.6	200.0	198.3	197.4	197.6	197.7	198.5	197.4	197.1	196.6
	15	193.2	193.3	194.6	194.5	194.5	194.9	193.4	192.5	192.4	192.5	191.8	191.7
	16	189.4	189.6	190.5	191.6	192.4	191.1	195.1	195.7	197.7	198.3	198.3	198.3
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	213.0	212.6	212.1	212.1	211.1	211.1	208.2	207.4	207.4	205.3	205.3	205.4
	19	213.4	213.1	213.4	211.9	213.3	213.8	215.8	215.4	215.4	214.3	214.3	214.3
	20	215.1	215.1	215.1	215.1	215.2	214.1	215.4	215.4	215.4	215.4	214.9	213.9
	21	208.9	210.5	210.1	210.0	213.7	215.6	215.0	214.5	216.4	217.4	218.9	219.1
	22	220.1	220.1	219.9	216.5	218.2	219.4	220.5	220.5	218.9	220.9	219.8	221.1
	23	221.7	220.1	218.7	217.1	216.0	214.2	213.1	212.5	211.7	210.0	206.7	208.0
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	214.5	214.5	214.5	212.8	210.6	210.0	210.0	210.6	210.3	209.1	207.9	208.3
	26	206.6	206.6	206.6	204.0	203.1	201.2	200.9	198.5	199.9	199.9	199.9	200.4
	27	206.6	207.4	205.7	207.1	208.1	208.8	208.4	209.1	209.1	209.4	209.6	210.3
	28	214.7	216.7	216.5	215.3	216.3	214.9	211.0	213.1	211.0	209.3	208.1	209.2
	29	208.6	206.7	203.8	202.6	206.3	205.0	205.0	205.0	202.8	203.4	205.0	207.1
	30	207.2	207.2	208.6	206.8	205.7	203.5	206.9	207.8	218.1	255.2	225.8	225.3
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	209.20	209.49	209.20	208.44	208.43	208.39	208.81	208.81	208.91	209.78	208.29	208.83	208.58

TEMPERATURE OF THE VERTICAL FORCE MAGNET.													12h.
	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	12h.
JANUARY.	1	48.1	48.3	48.0	48.1	48.1	48.2	47.5	47.9	47.4	47.4	47.0	47.2
	2	46.7	46.6	46.3	46.0	45.8	46.2	46.2	46.3	46.6	47.0	47.0	47.1
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	43.0	42.8	42.9	42.8	42.7	42.8	43.1	43.6	44.1	44.4	44.6	44.5
	5	47.2	46.8	46.2	45.7	46.3	46.4	45.0	44.9	46.2	46.8	46.8	46.7
	6	45.6	45.5	45.1	45.0	45.3	46.0	46.3	46.3	46.1	46.9	47.5	48.0
	7	46.6	46.6	46.5	46.1	46.2	46.3	46.1	45.6	45.0	45.0	44.8	44.5
	8	38.7	38.0	37.3	37.3	37.1	37.4	36.7	36.0	35.1	35.5	35.6	35.7
	9	34.3	34.1	34.0	33.8	34.0	34.6	35.2	36.0	36.0	36.5	36.9	35.9
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	29.3	29.5	29.8	29.8	30.1	30.8	30.1	29.1	29.0	28.8	28.7	29.5
	12	30.1	29.7	30.1	30.5	31.1	32.1	32.8	33.4	33.9	35.0	35.8	36.3
	13	36.2	36.3	36.1	36.2	37.1	38.6	40.0	39.7	40.7	42.0	42.4	42.6
	14	45.0	45.0	45.0	45.1	45.4	46.6	47.0	47.6	47.7	47.8	47.8	47.8
	15	49.8	49.4	49.0	48.6	48.4	48.8	49.1	50.0	50.3	50.4	50.5	50.2
	16	50.8	50.4	50.0	49.1	48.8	48.6	47.6	46.9	46.5	45.9	45.4	44.8
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	37.8	38.0	38.1	38.1	38.4	38.4	39.7	39.7	40.0	40.2	40.1	41.2
	19	39.2	38.7	38.7	38.1	37.7	37.2	37.1	37.1	36.9	36.8	36.5	36.4
	20	34.0	34.0	34.0	34.3	34.6	35.3	35.9	35.9	36.2	36.1	36.8	38.1
	21	39.1	39.1	39.1	38.4	37.4	37.1	36.9	36.6	36.9	36.6	36.2	35.5
	22	31.2	31.2	31.3	31.9	31.6	31.6	32.1	31.5	31.9	32.4	32.4	33.0
	23	32.8	33.0	33.4	33.9	34.6	35.5	36.2	37.8	38.1	39.0	39.3	39.5
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	36.2	36.1	35.8	36.8	37.6	38.1	38.1	38.3	39.1	39.5	39.7	39.5
	26	40.5	40.7	41.0	41.4	41.7	42.6	43.4	43.6	43.9	44.2	44.0	44.0
	27	40.2	40.4	39.8	39.8	40.0	39.8	39.3	39.7	39.1	38.1	38.5	37.6
	28	35.0	34.6	34.2	34.4	34.4	35.1	35.8	36.1	36.7	37.8	38.2	39.0
	29	39.1	39.3	39.5	39.9	39.4	39.7	40.0	40.7	41.1	42.0	42.0	41.6
	30	40.0	40.0	40.0	39.9	40.1	40.4	40.5	40.6	40.4	40.6	40.4	40.4
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	39.88	39.77	39.67	39.67	39.77	40.19	40.42	40.43	40.62	40.89	41.00	41.04	41.41

\* Twenty minutes late.

† Twelve minutes late.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
19878	19878	19973	19972	19972	19878	19972	19974	19974	19972	19570	19778	198726
20078	20070	20070	20070	20072	20070	20778	20976	20976	20774	20677	20772	201785
20472	20473	20378	20475	20271	20272	20272	18676	19374	19570	20471	20370	203722
20079	20178	19871	19770	19779	19874	19874	19878	20174	20179	20279	20276	200725
19774	19874	20075	20178	20374	20273	20273	20176	20174	20175	20074	20075	201718
20576	20672	20871	20779	20872	20978	21074	21075	21075	21078	21077	21270	204783
21972	21972	22074	22074	22071	22170	22179	22076	22175	22175	22175	22177	219744
21970	21878	21878	22074	22074	22071	22570	22578	22575	22572	22571	22274	221707
22670	22570	22370	22076	22275	22371	22571	22571	22575	22376	22570	22570	225785
21577	21577	22073	21679	21777	21774	21476	21674	21674	21770	21477	21477	218759
20577	20577	20577	20671	20576	20479	20476	20477	20477	20479	20279	20077	208716
19574	19771	19671	19670	19575	19575	19073	19276	19276	19471	19471	19373	196745
19479	19170	19076	19071	18979	18979	18979	19074	19076	19074	19071	19071	191797
20172	20178	20270	20375	20473	20474	21577	21575	21570	21570	21375	21475	204766
20573	20473	20376	20378	20571	20671	20671	20775	20676	20875	20776	20773	207762
21475	21475	21476	21571	21573	21579	21676	21676	21674	21674	21571	21571	214777
21273	21071	20970	20878	21072	20971	20874	20776	20775	20972	21278	21071	212730
21879	21871	21871	21872	21871	21877	22070	21970	22075	22077	22070	22171	216773
22171	22074	22173	21873	22073	22372	22372	22274	22276	22271	22170	22177	220756
20771	20777	20778	20778	20870	20870	21377	21573	21574	21575	21475	21477	212772
20873	20875	20770	20673	20579	20579	20671	20578	20676	20676	20676	20676	208789
20174	20275	20170	20470	20172	20478	20475	20475	20577	20577	20670	20673	203788
21073	21071	21171	21271	21271	21372	21273	21273	21372	21371	21375	21377	210725
20870	20870	21070	20975	21076	21074	21073	20575	20571	20379	20777	20977	210771
21077	21078	20777	20672	20577	20671	20779	20777	20678	20773	20771	20771	206736
22073	21971	21971	22171	22270	21872	22074	22073	22073	21370	21278	21276	216759
208758	208739	208748	208730	208763	208778	209727	209731	209776	209767	209763	209767	208796

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

4770	4772	4771	4773	4676	4673	4670	4670	4670	4674	4676	4677	4676	47720
4770	4771	4771	4774	4770	4676	4676	4676	4676	4674	4675	4675	4675	45751
4476	4475	4475	4472	4470	4677	4676	4676	4772	4774	4776	4774	4774	44791
4678	4677	4677	4678	4677	4676	4676	4679	4673	4672	4672	4673	4578	46741
4775	4870	4870	4777	4774	4770	4676	4675	4674	4676	4677	4679	4770	46767
4178	4175	4175	4270	4174	4170	4072	3977	3971	3975	4070	4070	4070	43730
3576	3577	3577	3573	3377	3378	3379	3378	3379	3470	3470	3471	3472	35733
3579	3673	3671	3671	3670	3671	3671	3671	3671	3671	3671	3671	3671	34705
3076	3171	3173	3170	3170	3078	3078	3075	3073	3070	2977	2971	2971	30719
3570	3772	3676	3676	3672	3670	3676	3676	3673	3675	3675	3675	3673	31759
4275	4272	4272	4272	4272	4271	4276	4278	4278	4372	4376	4474	40787	47756
4874	4871	4871	4876	4878	4879	4971	4973	4973	4973	4973	4578	4578	47756
5075	5076	5172	5172	5172	5172	5172	5171	5079	5170	5170	5170	5170	50730
4478	4471	4370	4178	4170	4075	3575	3576	3670	3672	3676	3772	3772	43764
4272	4178	4272	4272	4177	4175	4171	4077	4076	4075	4071	4070	4070	40730
3674	3673	3672	3672	3670	3571	3479	3472	3470	3471	3473	3470	3470	36735
3972	4070	3979	3979	3977	3974	3976	4070	4070	3975	3973	3971	37755	37755
3670	3578	3478	3476	3477	3471	3379	3376	3278	3273	3178	3173	3173	35761
3372	3376	3372	3371	3277	3273	3272	3274	3274	3271	3272	3275	3275	32723
4070	3977	3977	3978	4070	4070	3572	3572	3573	3577	3579	3579	3579	36790
3977	3976	3978	4075	4076	4072	4070	4070	4070	4070	4070	4074	4074	38798
4470	4378	4373	4275	4273	4176	4178	4270	4174	4078	4074	4070	4070	42729
3778	3774	3771	3772	3771	3773	3773	3773	3773	3676	3673	3571	3571	38718
3974	3976	3978	3979	3977	3975	3973	3971	3879	3878	3879	3879	3879	37763
4179	4271	4274	4272	4270	4179	4174	4076	4074	4072	4070	4070	4070	40783
4173	4076	4072	3975	3973	3973	3576	3576	3577	3670	3675	3771	3771	39717
4171	41730	41713	40788	40780	40756	39792	39752	39750	39752	39752	39734	40728	

\* Ten minutes late.

VERTICAL FORCE.													
One Scale Division = .000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
FEBRUARY.	1	214.2	214.2	212.5	210.1	210.6	212.3	211.2	209.4	208.0	205.8	205.8	203.7
	2	198.7	200.4	200.1	199.2	198.6	197.3	196.7	195.6	195.2	196.1	195.5	195.5
	3	192.6	196.3	192.9	192.8	191.2	193.2	194.7	194.6	193.6	194.7	194.7	197.7
	4	208.0	211.3	215.5	213.2	212.4	211.1	214.4	213.4	212.3	209.7	210.0	208.6
	5	211.0	210.4	214.4	213.2	212.1	211.9	210.2	209.5	208.0	206.6	205.0	204.8
	6	202.0	203.1	200.0	200.3	202.3	203.2	205.4	206.9	209.9	214.0	212.8	212.8
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	203.1	202.8	202.2	198.5	199.7	198.6	199.8	199.9	199.3	200.3	199.2	199.2
	9	197.1	198.7	195.3	194.5	193.9	193.7	194.5	195.0	195.1	195.3	197.6	199.1
	10	197.9	197.6	197.6	198.1	197.9	195.9	195.0	195.8	195.8	195.8	195.8	195.8
	11	200.7	200.6	203.3	202.9	201.6	202.2	202.1	201.3	202.4	202.4	204.3	204.3
	12	205.0	205.7	206.0	203.4	201.7	201.8	201.8	200.2	199.8	199.2	199.5	199.7
	13	203.9	203.3	204.3	204.1	203.1	201.5	200.0	201.1	201.8	203.4	202.8	201.7
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	203.9	204.2	202.2	202.3	202.2	202.2	200.5	200.6	201.7	203.2	202.5	201.0
	16	206.7	206.7	208.7	211.5	210.1	210.3	210.1	212.0	211.5	210.3	210.2	201.1
	17	207.0	206.6	206.6	205.1	204.7	203.8	202.2	201.4	200.8	199.5	198.7	198.9
	18	204.5	204.5	204.2	202.1	200.7	200.3	198.3	198.3	199.0	198.2	197.5	196.4
	19	198.4	198.0	198.8	198.8	199.0	198.2	197.1	197.1	197.1	195.8	194.9	194.9
	20	195.6	197.5	197.6	196.6	196.1	196.1	198.4	199.0	200.0	199.7	200.0	200.0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	200.9	201.6	202.8	202.8	203.0	201.5	205.5	207.6	209.1	207.1	212.8	214.4
	23	203.1	218.0	217.7	215.4	213.7	211.6	211.2	—	210.9	—	—	212.3
	24	207.6	213.4	218.1	207.6	208.1	211.5	210.3	211.4	210.9	214.9	213.6	214.3
	25	204.3	211.6	209.4	207.2	206.0	205.4	204.3	208.1	205.5	203.7	203.7	201.0
	26	203.7	214.1	213.8	212.8	210.3	208.3	206.8	206.5	208.7	205.3	204.5	207.9
	27	204.1	203.6	204.7	204.2	203.4	204.5	203.3	201.9	200.8	201.0	201.4	201.4
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	202.58	205.17	205.32	201.03	203.43	203.31	203.08	202.50	203.22	202.70	202.73	203.15	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
FEBRUARY.	1	37.3	37.8	38.1	38.3	38.5	38.7	39.3	39.6	40.6	41.4	42.0	42.2
	2	41.7	41.3	45.4	45.4	45.5	46.4	47.0	47.3	47.6	47.7	48.2	48.2
	3	49.2	49.0	49.0	48.7	48.9	48.9	48.9	48.7	48.3	48.2	46.9	46.2
	4	37.9	37.1	36.6	37.1	36.4	36.5	36.9	37.6	38.1	38.9	39.1	39.3
	5	36.3	36.2	36.3	36.2	37.0	37.2	38.0	38.5	39.3	39.8	40.2	40.4
	6	39.1	39.0	39.7	39.5	39.9	40.3	39.8	40.2	40.8	41.4	42.0	42.6
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	42.8	43.0	43.5	43.8	43.7	44.2	44.6	44.9	45.0	45.4	45.5	45.4
	9	46.2	46.2	48.8	47.5	47.2	47.2	47.2	47.2	47.1	47.1	47.1	47.2
	10	45.6	45.8	45.9	45.0	45.2	45.8	46.3	46.6	46.6	47.0	47.2	47.4
	11	43.4	43.0	42.2	42.3	42.6	42.4	42.6	43.2	42.9	43.0	42.6	42.6
	12	41.4	41.4	41.7	42.7	42.6	43.4	43.8	44.3	44.7	45.0	45.1	45.3
	13	41.7	41.7	40.8	40.8	41.0	41.8	42.3	42.8	42.5	42.5	42.5	42.4
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	41.8	41.6	41.3	41.2	41.4	42.2	42.4	42.5	42.3	42.4	42.2	42.3
	16	38.9	38.2	37.8	36.6	36.7	36.9	36.7	37.0	37.2	39.0	38.4	38.2
	17	40.0	40.0	40.6	40.4	40.8	41.4	42.1	43.0	43.6	44.4	44.9	45.0
	18	41.6	41.4	41.4	41.4	41.9	42.4	43.1	43.8	44.1	44.5	45.2	45.8
	19	45.2	45.6	45.9	45.0	45.0	45.2	45.5	45.6	46.3	46.6	46.8	46.5
	20	46.0	46.0	45.6	45.2	45.4	45.3	44.9	44.2	44.0	43.8	43.9	44.4
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	37.1	36.9	36.9	37.1	37.1	38.6	38.7	40.0	40.1	40.0	40.0	39.7
	23	36.3	35.3	35.8	37.3	37.1	37.4	37.9	—	38.1	—	—	39.4
	24	33.3	33.5	31.0	35.1	35.3	36.3	37.7	38.0	38.8	39.8	40.0	40.0
	25	39.9	39.3	39.3	39.6	40.5	41.3	42.0	42.4	42.9	43.9	44.4	44.8
	26	39.1	38.8	38.8	40.5	40.3	41.3	42.1	42.7	42.6	43.4	42.9	42.7
	27	42.7	42.2	42.0	42.1	42.6	43.7	44.2	44.4	44.8	44.4	44.6	44.9
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41.15	40.97	41.14	41.20	41.35	41.87	42.26	42.80	42.85	43.42	43.55	43.41	

\* Five minutes late.

† Two minutes late.

1'64.

0h.	11h.
Div.	Sec. Div.
5'8	203'7
5'5	195'5
4'7	197'7
0'0	208'6
5'0	204'8
2'8	212'8
—	—
9'2	199'2
7'6	199'1
5'8	195'8
4'3	204'3
9'5	199'7
2'8	201'7
—	—
2'5	201'0
0'2	210'1
8'7	198'9
7'5	196'4
9'9	194'9
0'0	200'0
—	—
2'8	214'4
—	212'3
4'6	214'3
3'7	201'0
4'5	207'9
1'4	201'4
—	—
02'73	203'15

VERTICAL FORCE.

One Sec. Division = 0.00065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
203'4	202'4	203'4	204'5	203'6	203'3	204'0	203'4	203'2	201'5	201'2	198'8	206'23
195'1	195'2	193'8	194'0	194'7	194'7	193'6	192'8	192'0	191'7	190'0	190'5	195'29
198'4	199'6	203'4	203'5	202'4	203'1	203'3	204'1	204'4	206'1	208'3	208'0	198'90
208'3	208'1	208'3	208'4	208'6	209'0	208'8	210'7	210'7	211'2	211'2	211'0	210'59
204'8	204'8	204'8	204'8	204'5	204'5	204'5	205'1	205'2	204'2	204'5	202'1	207'12
211'0	210'4	209'5	209'5	205'0	204'7	—	—	—	—	—	—	206'68
—	—	—	—	—	—	207'8	207'8	206'9	206'4	205'5	—	203'1
200'0	200'0	200'0	199'1	200'0	200'0	199'0	198'1	197'4	196'1	197'3	197'1	199'45
198'7	198'0	199'3	197'6	195'8	195'8	196'1	196'2	196'9	198'1	198'3	197'6	196'59
195'3	195'4	195'5	195'5	196'0	196'4	199'0	199'0	199'0	199'4	199'7	199'8	197'04
204'2	204'5	205'6	203'5	203'9	203'9	204'1	204'0	204'0	204'3	204'1	205'0	203'30
201'3	201'9	202'4	201'7	204'3	203'8	203'8	205'2	205'2	205'0	204'7	203'9	202'92
201'2	201'2	204'7	205'6	204'9	204'4	—	—	—	—	—	—	—
—	—	—	—	—	—	208'4	207'5	205'8	204'9	203'0	203'0	203'37
200'4	200'6	201'4	202'8	203'1	205'2	205'7	204'0	205'4	205'6	198'5	205'2	202'68
208'8	207'2	207'2	208'2	208'1	208'4	205'1	204'0	205'1	207'2	207'1	207'0	208'41
198'3	198'3	198'7	198'9	201'7	203'3	203'3	203'3	201'1	204'3	203'9	204'5	202'41
196'8	198'4	197'3	199'0	199'6	200'0	200'0	198'5	198'5	199'1	198'4	197'4	199'42
194'0	194'0	194'0	192'7	193'9	195'4	195'4	195'4	195'6	194'3	195'8	195'4	196'00
200'0	201'4	200'0	199'0	198'7	201'0	—	—	—	—	—	—	200'39
—	—	—	—	—	—	212'0	212'7	209'3	198'3	201'1	199'2	—
219'2	231'5	238'1	222'6	211'7	205'5	181'2	207'2	206'7	213'0	214'2	214'0	210'00
209'9	210'3	211'1	212'3	212'5	213'2	214'5	215'1	215'2	215'2	213'5	215'4	213'43
215'1	217'3	215'2	209'4	209'7	209'7	203'5	208'9	195'2	196'6	206'8	206'8	209'83
202'1	203'1	207'7	205'6	196'5	197'9	198'4	193'0	201'6	200'8	199'5	204'4	203'37
205'9	202'3	202'1	198'7	198'2	199'9	200'3	201'6	201'0	201'3	202'1	200'6	205'07
201'4	202'3	199'5	199'6	198'7	200'7	—	—	—	—	—	—	—
—	—	—	—	—	—	210'7	212'9	211'4	210'4	211'3	211'1	204'22
—	—	—	—	—	—	—	—	—	—	—	—	—
203'07	203'68	204'29	203'27	202'35	202'66	202'73	203'77	203'32	203'13	203'33	203'37	203'40

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

°	°	°	°	°	°	°	°	°	°	°	°	°
42'4	42'7	42'9	42'7	42'7	42'5	42'3	43'0	43'4	43'6	44'0	41'6	41'27
48'2	48'2	47'9	48'4	48'4	48'7	49'2	49'4	49'6	49'7	50'0	49'4	47'70
45'6	44'4	43'4	42'4	41'6	41'1	40'6	40'0	39'6	39'2	39'0	38'5	41'85
39'4	39'8	39'6	39'2	39'0	38'7	38'7	38'7	38'2	38'0	37'8	37'0	38'15
40'4	41'0	41'0	40'9	40'9	40'7	40'5	40'2	40'0	40'0	39'8	39'8	39'19
43'5	43'3	42'7	42'1	41'4	40'8	—	—	—	—	—	—	—
—	—	—	—	—	—	40'4	40'4	40'7	41'3	41'7	42'6	41'05
45'4	45'4	45'8	46'0	46'0	46'0	46'0	46'0	46'1	46'0	46'5	46'2	45'13
47'4	47'6	47'6	47'1	47'6	47'4	47'0	47'0	46'5	46'0	45'6	45'5	47'01
47'4	47'2	47'0	47'2	46'8	46'0	45'6	45'2	45'0	44'7	44'4	44'2	46'05
42'8	42'2	42'2	42'6	42'8	42'2	42'3	41'5	41'2	41'6	41'4	41'4	42'38
45'0	44'4	43'8	43'2	43'0	41'9	41'3	41'4	41'3	41'4	41'4	41'6	42'96
42'4	42'2	42'3	41'4	41'5	41'7	—	—	—	—	—	—	—
—	—	—	—	—	—	39'8	39'7	40'8	41'2	41'9	42'0	41'65
43'0	43'0	43'0	42'4	41'7	41'5	41'2	40'6	39'9	39'5	39'5	39'1	41'57
39'4	40'0	39'6	39'7	39'7	39'7	39'8	40'4	40'3	40'1	40'0	39'7	38'71
45'0	45'4	45'4	44'9	44'3	43'6	43'4	43'1	42'2	41'5	41'7	41'4	42'85
45'2	45'8	45'4	44'9	44'7	44'4	44'2	44'6	45'2	45'2	45'2	45'1	44'03
46'8	46'6	46'9	47'4	47'4	47'3	47'1	46'6	46'6	46'6	46'8	46'7	46'33
44'4	44'0	44'2	44'6	44'4	43'2	—	—	—	—	—	—	—
—	—	—	—	—	—	36'3	36'3	36'3	36'4	36'8	37'1	42'61
39'8	40'4	40'7	40'6	40'8	40'8	40'8	40'2	39'5	39'0	38'6	37'0	39'18
39'2	39'2	39'2	38'7	37'8	37'0	36'8	35'6	35'0	34'3	34'0	33'6	36'90
40'1	39'8	39'8	39'1	39'1	39'1	39'2	39'3	39'1	39'1	39'1	39'7	38'10
45'1	45'0	44'7	44'7	44'1	43'7	43'5	42'6	41'9	41'0	40'0	39'5	42'34
43'4	45'0	44'9	44'6	44'6	45'0	44'8	44'0	44'4	44'2	43'9	43'8	42'82
44'9	44'8	44'7	44'6	44'6	44'5	—	—	—	—	—	—	—
—	—	—	—	—	—	37'8	37'8	37'9	37'9	38'0	37'5	42'39
—	—	—	—	—	—	—	—	—	—	—	—	—
43'55	43'44	—	—	—	—	—	—	—	—	—	—	—
43'62	43'63	43'53	43'31	43'12	42'81	42'02	41'82	41'70	41'56	41'55	41'38	42'33

\* Three minutes late.

VERTICAL FORCE.												
One Scale Division = '000063 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean (G. Unit - 1) gen Time. - 4	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	211'3	210'0	210'3	208'5	206'0	204'9	208'3	208'2	212'1	221'0	224'1	224'4
2	211'0	210'4	210'3	203'5	203'6	203'9	202'7	201'4	201'0	200'4	199'9	198'9
3	201'5	201'7	201'9	201'3	201'3	199'7	199'1	199'6	199'6	197'9	196'7	195'2
4	199'4	199'6	199'0	195'7 <sup>a</sup>	194'9	194'9	195'4	196'1	196'3	196'3	197'2	197'2
5	204'4	205'7	206'1	194'9	198'7	198'6	196'6	196'2	196'9	196'9	196'1	195'7
6	197'1	196'6	198'9	196'8	191'5	193'0	193'0	191'2	192'8	189'7	193'0	193'0
7	—	—	—	—	—	—	—	—	—	—	—	—
8	197'3	199'1	199'1	191'2	191'5	195'3	197'0	197'0	198'4	199'7	202'5	200'5
9	195'0	198'5	200'1	204'5	204'9	204'9	208'0	206'8	208'0	206'4	206'7	206'8
10	206'3	206'3	207'4	204'2	202'9	200'7	201'5	205'6	201'0	202'5	202'3	202'9
11	205'2	206'8	208'1	205'0	205'0	205'9	205'0	201'3	202'4	201'8	200'7	201'7
12	210'5	211'0	212'6	210'8	208'2	207'1	207'1	206'6	206'3	205'4	206'4	205'6
13	210'6	210'6	210'6	208'4	207'4	205'3	205'2	202'9	202'9	201'5	202'5	209'6
14	—	—	—	—	—	—	—	—	—	—	—	—
15	206'6	208'4	208'2	209'2	205'9	205'2	203'3	203'1	203'8	204'9	204'6	204'6
16	211'2	214'3	213'9	209'5	209'8	208'0	206'9	207'0	207'7	209'0	207'0	207'0
17	213'1	214'1	213'5	207'9	207'6	205'6	205'1	201'9	203'8	202'1	200'5	200'6
18	198'7	201'3	200'0	198'1	196'0	193'5	190'7 <sup>c</sup>	188'3	188'3	187'0	187'6	188'4
19 <sup>d</sup>	190'4	175'7	171'8	176'9	186'4	203'6	209'0	202'4	206'5	239'6	212'2	208'3
20	195'8	195'9	197'2	197'0	196'2	194'6	193'3	192'0	193'0	193'0	194'1	196'8
21	—	—	—	—	—	—	—	—	—	—	—	—
22	208'3	207'9	207'0	206'5	205'7	204'5	204'3	202'8	202'7	202'7	202'7	203'0
23	193'4	195'0	197'2	197'2	195'8	194'6	193'2	191'5	192'5	192'5	192'0	193'6
24	196'1	196'1	194'9	196'0	192'4	191'6	190'6	192'4	193'9	196'1	195'8	195'7
25	189'2	191'7	190'8	188'0	186'7	185'6	187'1	188'0	188'8	190'4	190'6	191'7
26	190'1	191'6	195'3	195'4	191'4	193'3	192'6	193'3	193'3	194'8	193'9	194'5
27	205'2	207'7	208'2	206'0	201'7	205'7	207'6	207'4	207'4	209'3	209'6	205'4
28	—	—	—	—	—	—	—	—	—	—	—	—
29	203'4	202'8	200'4	197'6	194'9	194'9	194'1	194'0	194'8	194'8	193'6	193'4
30	196'8	200'6	200'0	198'9	198'2	198'8	198'2	198'8	199'1	199'5	199'1	202'3
31	205'1	204'3	200'5	202'1	201'9	202'6	202'1	198'2	199'3	198'8	198'6	199'1
Hourly Means	202'41	203'50	203'53	201'33	200'46	199'72	199'54	199'14	199'58	199'80	199'93	200'27

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
1	37'4	37'4	37'9	39'0	39'3	39'9	39'6	40'0	40'4	40'6	40'6	40'6
2	40'5	40'4	41'0	43'0	42'9	42'8	43'4	44'4	45'0	45'6	46'1	46'2
3	44'7	44'6	44'2	44'4	44'7	45'2	46'0	46'4	46'8	47'4	48'0	48'2
4	45'1	45'0	45'8	47'0	47'1	47'5	47'8	47'9	48'2	48'9	49'3	49'4
5	43'8	43'3	43'4	48'0	44'9	45'8	46'4	47'0	47'4	48'2	48'4	48'6
6	45'4	45'3	45'4	46'3	47'4	48'0	48'4	48'6	48'7	49'6	49'0	49'0
7	—	—	—	—	—	—	—	—	—	—	—	—
8	44'5	44'4	45'4	47'2	46'4	46'6	46'7	47'0	47'0	46'7	47'0	47'0
9	42'2	41'6	40'9	40'6	40'6	40'6	40'8	41'0	41'0	41'0	41'1	40'7
10	40'4	40'3	40'6	41'8	42'2	43'3	43'7	44'2	44'4	45'8	44'9	45'0
11	41'4	40'9	40'8	41'2	40'6	40'6	41'4	41'7	42'2	42'3	43'4	43'2
12	37'0	36'6	37'0	38'2	39'3	40'0	40'0	39'9	40'2	41'6	41'5	42'0
13	38'1	38'0	38'7	39'0	39'3	39'8	40'7	41'2	41'8	42'8	43'4	43'8
14	—	—	—	—	—	—	—	—	—	—	—	—
15	40'2	39'7	39'6	39'2	39'4	39'8	39'8	42'2	42'0	42'1	42'1	42'0
16	38'0	37'8	37'8	39'5	38'2	38'2	38'5	39'8	40'0	40'4	40'7	41'0
17	37'2	37'5	38'2	40'2	40'0	40'3	41'0	41'7	41'8	42'5	43'4	43'6
18	44'2	43'7	44'2	44'5	45'3	46'4	47'3	47'6	48'6	49'4	50'6	51'0
19 <sup>d</sup>	45'4	45'6	46'3	47'0	47'6	48'1	49'1	49'3	49'5	50'0	51'0	51'0
20	48'9	48'4	48'0	48'0	48'4	48'8	49'2	50'0	50'0	50'0	50'0	49'4
21	—	—	—	—	—	—	—	—	—	—	—	—
22	41'7	41'6	41'9	42'4	42'6	42'6	43'2	43'3	43'5	43'8	44'2	44'2
23	46'6	46'4	46'4	46'5	46'5	46'9	47'5	48'4	48'7	49'1	50'0	50'2
24	47'4	47'4	48'2	48'8	49'6	49'8	49'8	49'5	49'9	50'5	51'2	51'8
25	50'6	49'8	51'0	52'0	52'2	52'1	52'0	52'2	52'4	52'5	52'5	52'4
26	49'8	49'3	48'6	48'6	49'0	49'3	49'6	50'0	50'1	50'3	50'3	50'0
27	41'3	40'8	41'0	41'4	41'4	41'4	41'2	41'0	40'8	41'4	41'9	42'2
28	—	—	—	—	—	—	—	—	—	—	—	—
29	43'0	43'4	44'5	44'9	47'0	47'4	48'2	48'6	48'7	48'7	49'2	49'0
30	44'6	44'2	44'9	45'4	45'7	46'0	46'0	45'7	45'7	45'6	45'0	44'6
31	41'6	42'4	44'1	44'7	45'2	45'6	45'7	46'0	46'4	46'0	46'0	46'0
Hourly Means	42'91	42'69	43'07	43'92	44'05	44'41	44'77	45'20	45'45	45'89	46'15	46'19

<sup>a</sup> Six minutes late.

<sup>b</sup> Twelve minutes late.

<sup>c</sup> Five minutes late.

VERTICAL FORCE.

One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

1' 64.		12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
225'8	225'2	210'9	219'8	216'3	215'9	211'6	211'7	211'1	211'1	209'9	209'9	209'9	209'9	213'72
198'7	199'9	200'6	201'1	201'1	202'1	202'1	202'1	201'6	201'6	200'8	200'9	200'9	200'9	202'46
195'3	195'1	195'1	195'6	195'6	195'6	196'2	196'7	197'2	197'2	198'4	198'4	198'4	198'4	198'03
203'7	201'8	205'7	202'2	201'3	201'9	203'4	196'8	197'3	199'7	199'6	203'2	203'2	203'2	199'23
196'8	199'5	198'9	198'9	198'0	197'0	196'4	194'7	195'6	196'2	196'5	196'5	196'5	196'5	198'02
193'7	191'6	195'7	195'7	191'8	191'3	—	—	—	—	—	—	—	—	193'59
—	—	—	—	—	—	195'4	192'7	192'7	192'7	187'9	192'3	—	—	192'51
203'8	203'1	202'1	198'2	198'7	200'0	200'0	195'3	200'0	194'0	183'3	190'3	190'3	190'3	197'51
206'8	207'0	209'3	209'7	209'7	207'8	205'0	205'4	207'2	207'2	207'2	207'2	207'2	207'2	205'84
203'9	203'9	202'2	202'9	202'6	202'0	205'7	205'8	203'0	202'3	204'2	203'2	203'2	203'2	203'68
203'3	203'3	201'4	205'7	205'8	205'8	207'6	207'2	209'5	211'2	209'6	206'6	206'6	206'6	205'62
201'3	201'2	205'0	207'4	210'1	210'7	209'9	210'0	216'3	210'3	211'9	211'0	211'0	211'0	208'42
211'0	209'9	207'2	207'5	207'1	207'1	—	—	—	—	—	—	—	—	206'85
—	—	—	—	—	—	209'1	206'2	206'2	206'2	203'8	205'6	—	—	206'85
201'9	203'7	205'0	205'4	206'1	206'9	207'3	207'5	208'2	210'4	210'4	210'6	210'6	210'6	206'41
206'7	207'4	208'9	207'7	208'3	209'1	209'6	209'6	209'6	210'7	210'7	210'7	210'7	210'7	209'20
201'0	201'5	201'5	201'3	201'2	200'7	200'7	199'2	198'3	195'4	198'5	198'5	198'5	198'5	203'20
189'3	190'0	192'5	192'6	191'1	191'3	191'7	191'6	191'6	191'9	189'1	189'1	189'1	189'1	192'05
212'2	216'2	217'7	203'9	161'3	79'6	174'6	200'9	206'3	202'5	195'4	197'5	197'5	197'5	193'91
201'5	203'4	203'4	195'3	197'9	183'6	—	—	—	—	—	—	—	—	198'41
—	—	—	—	—	—	203'1	201'0	205'5	207'8	206'8	208'3	—	—	198'41
202'7	202'5	202'5	201'0	201'3	200'7	200'7	200'6	195'1	193'5	191'9	189'0	189'0	189'0	201'65
191'1	197'6	197'5	198'2	195'9	195'2	193'2	182'3	180'3	193'0	195'1	195'7	195'7	195'7	193'62
191'7	191'1	191'2	192'0	191'4	190'7	175'8	174'0	187'2	189'4	188'9	188'5	188'5	188'5	191'10
190'6	194'5	188'4	188'6	189'1	189'1	190'3	186'6	186'6	186'5	188'5	188'5	188'5	188'5	188'79
191'7	191'7	191'8	198'2	198'2	198'2	198'6	202'6	201'8	203'0	199'2	201'9	—	—	196'43
205'4	206'0	206'0	205'3	196'1	196'1	—	—	—	—	—	—	—	—	207'42
—	—	—	—	—	—	201'1	206'3	206'5	201'8	205'5	203'5	—	—	207'42
193'9	191'8	191'8	195'1	196'6	197'0	197'0	196'5	196'6	191'9	191'4	195'89	—	—	195'89
200'8	201'1	202'0	202'3	204'5	202'8	202'6	202'6	202'5	203'8	203'8	205'1	—	—	200'97
198'7	199'2	199'8	202'1	200'8	200'6	202'8	202'5	201'0	201'3	201'3	205'5	—	—	201'55
201'12	201'16	200'99	201'15	200'85	200'08	200'78	199'65	200'21	200'79	199'92	200'45	—	—	200'68

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

40'6	41'0	41'3	41'5	41'4	41'2	41'0	40'7	40'4	40'3	40'4	40'4	40'4	40'4	40'12
45'9	45'6	45'4	45'0	41'7	41'8	44'7	44'6	44'8	45'0	45'1	44'7	44'7	44'7	44'23
47'9	48'0	48'0	48'0	48'0	48'0	47'6	46'9	46'6	46'2	45'7	45'2	45'2	45'2	46'53
49'4	49'3	49'0	48'6	47'6	47'6	47'2	46'5	45'6	45'0	41'7	41'1	41'1	41'1	47'23
48'7	48'2	47'6	47'8	47'6	47'4	47'4	47'3	46'5	46'4	46'4	45'9	45'9	45'9	46'77
48'6	48'6	48'2	47'5	47'1	46'8	—	—	—	—	—	—	—	—	46'85
—	—	—	—	—	—	41'5	41'4	41'4	41'4	41'0	41'7	—	—	46'85
46'9	46'3	45'8	44'9	41'4	43'6	43'2	43'1	43'4	43'4	43'3	43'2	43'2	43'2	45'31
40'4	40'4	40'1	40'0	40'0	40'4	40'6	40'7	40'6	40'6	40'2	40'4	40'6	40'6	40'69
45'2	45'0	45'0	43'7	43'9	43'6	42'7	42'4	42'0	41'8	41'8	41'8	41'8	41'8	43'15
42'6	43'1	42'6	42'0	41'4	40'7	40'4	39'6	39'2	38'4	37'7	37'3	37'3	37'3	41'03
42'1	42'5	42'2	41'4	40'5	39'8	39'1	39'1	38'7	38'6	38'3	38'3	38'3	38'3	39'75
43'3	42'4	42'2	42'2	41'9	41'4	—	—	—	—	—	—	—	—	40'93
—	—	—	—	—	—	39'8	40'5	40'5	40'5	40'5	40'6	40'6	40'6	40'63
41'9	42'2	41'4	41'4	41'1	40'4	40'3	39'6	39'6	39'0	38'2	38'2	38'2	38'2	40'55
41'0	40'6	39'8	40'0	29'7	29'6	29'5	29'2	29'1	29'0	38'8	37'8	37'8	37'8	39'33
43'6	43'7	43'8	43'6	43'6	43'6	44'2	44'2	44'2	41'4	44'2	43'9	42'5	42'5	42'25
51'0	50'5	49'7	49'3	48'9	48'5	48'2	47'3	47'0	46'5	46'2	46'0	45'8	45'8	45'58
51'0	52'2	52'2	51'5	51'1	50'3	50'2	49'7	49'3	49'3	51'0	49'2	49'2	49'2	49'45
49'8	49'7	49'8	50'0	50'0	—	—	—	—	—	—	—	—	—	47'56
—	—	—	—	—	—	42'6	42'0	42'1	42'2	42'4	41'7	—	—	47'56
44'3	45'0	45'2	45'6	45'6	45'6	45'6	45'4	45'3	45'6	46'0	46'6	46'6	46'6	44'20
50'4	50'4	49'7	49'9	50'0	49'8	49'8	49'5	49'3	48'7	48'4	48'0	48'0	48'0	48'64
51'8	52'4	52'9	52'0	51'3	51'2	51'2	51'4	50'8	50'3	51'0	51'4	51'4	51'4	50'48
52'2	52'0	51'6	51'6	51'5	51'5	51'4	51'7	51'6	51'2	51'0	50'8	50'8	50'8	51'66
49'7	48'6	48'0	47'4	46'6	46'0	45'4	41'7	44'2	43'6	42'6	42'3	42'3	42'3	47'67
42'2	42'2	42'3	41'7	41'6	41'6	—	—	—	—	—	—	—	—	41'63
—	—	—	—	—	—	41'6	41'7	41'7	42'0	42'3	42'5	—	—	41'63
48'3	47'7	47'6	47'6	47'5	47'2	47'1	46'8	46'4	45'7	44'8	44'8	44'8	44'8	46'91
44'8	44'8	44'4	44'2	43'8	43'4	43'4	42'8	42'4	41'9	41'5	41'7	41'7	41'7	44'27
45'5	44'8	44'6	44'0	43'8	43'7	43'4	43'2	42'4	42'2	42'0	41'8	41'8	41'8	44'22
46'09	45'96	45'70	45'42	45'14	44'90	44'20	44'09	43'82	43'62	43'43	43'23	—	—	44'60

\* Not included in the Means, on account of disturbance.

• Ten minutes etc.



VERTICAL FORCE.													
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.													
Mean Guttin- gen Times.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
APRIL.	1	Sc. Div. 205'7	Sc. Div. 205'9	Sc. Div. 201'5	Sc. Div. 201'0	Sc. Div. 201'2	Sc. Div. 198'7	Sc. Div. 198'3	Sc. Div. 198'1	Sc. Div. 199'4	Sc. Div. 199'1	Sc. Div. 199'4	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	188'9	193'7	192'6	192'6	191'3	193'6	192'0	197'4	205'5*	202'6	225'4	211'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	201'0	198'0	191'7	193'5	192'1	190'4	190'2	185'8	185'8	185'8	192'4	192'6
	6	191'4	191'6	193'3	193'3	191'4	190'2	189'2	189'2	189'2	190'1	190'5	189'8
	7	187'1	188'2	185'3	184'7	183'3	182'4	181'3	187'2	190'8	187'1	188'9	190'0
	8	183'5	185'5	187'3	181'4	184'4	185'0	186'3	185'0	186'3	185'7	181'4	181'7
	9	189'7	188'2	185'9	185'2	184'1	181'1	183'6	185'9	187'6	187'7	186'2	185'1
	10	189'7	187'7	181'8	182'8	181'2	181'8	182'9	183'8	185'2	186'6	186'8	186'4
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	195'2	191'2	192'9	191'6	188'4	186'8	186'8	187'1	188'4	188'1	186'7	186'0
	13	192'3	189'7	188'0	187'1	186'5	181'4	181'8	185'6	186'9	189'6	189'6	189'0
	14	190'6	189'5	186'9	186'6	185'0	184'8	185'0	187'9	189'9	191'4	191'7	198'5
	15	192'5	192'3	191'0	190'6	190'6	192'0	192'0	190'8	191'6	192'9	192'6	193'0
	16	199'6	197'6	196'3	191'8	191'7	192'7	193'3	192'0	193'3	195'1	195'7	196'0
	17	188'2	184'1	187'5	189'6	188'6	191'4	191'4	191'9	191'9	191'9	195'6	196'5
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19 <sup>b</sup>	206'3	205'3	201'6	202'8	199'5	198'2	197'6	196'9	197'6	195'9	195'9	195'0
	20 <sup>b</sup>	148'0	136'0	143'0	171'5	184'5	196'4	197'7	206'9	220'6	222'8	208'6	202'1
	21 <sup>b</sup>	177'7	160'9	150'6	171'4	181'7	183'8	185'0	203'8	191'8	191'1	181'7	195'7
	22	170'6	170'6	171'0	172'8	173'3	175'3	179'2	178'6	186'9	179'6	178'0	178'8
	23	186'6	187'7	189'0	189'3	188'2	188'0	187'5	186'7	186'5	186'0	185'0	181'8
	24	193'1	191'5	190'1	187'8	186'6	183'4	182'8	183'2	181'3	181'1	181'1	183'8
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	186'6	187'7	186'5	186'3	181'6	182'4	180'7	179'5	179'1	178'4	177'7	177'9
	27	182'6	181'9	181'7	181'1	181'1	181'1	181'1	183'2	184'2	183'2	181'2	184'6
	28	191'2	188'0	185'4	181'5	182'6	182'8	183'1	186'1	188'1	188'6	186'5	190'0
	29	188'4	190'4	190'6	189'9	188'7	188'0	188'0	188'7	188'7	190'8	190'8	197'6
	30	175'6	174'9	183'5	183'8	187'3	188'1	188'1	190'8	190'8	193'6	196'3	197'7
Hourly Means	189'81	189'22	188'74	189'17	187'33	186'87	186'90	187'55	189'07	189'33	190'85	190'56	

TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
APRIL.	1	41'0	41'0	41'2	42'0	43'2	41'0	44'5	45'0	45'2	45'5	45'5	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	41'2	41'6	42'4	46'5	47'2	48'3	49'3	49'6	50'0	50'8	51'1	51'5
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	46'0	46'5	48'1	49'4	50'0	51'0	51'3	51'5	51'6	51'8	51'8	51'8
	6	48'6	48'8	49'6	49'5	50'0	50'4	51'0	51'4	51'9	52'2	52'5	52'5
	7 <sup>b</sup>	52'2	51'8	52'0	52'0	52'2	52'5	52'8	53'2	53'7	54'1	55'2	56'2
	8	56'1	54'4	51'4	51'5	55'0	55'5	56'1	56'5	57'4	58'2	59'0	59'2
	9	52'3	53'2	53'6	53'5	54'0	54'0	54'1	53'6	53'8	54'5	54'8	55'0
	10	51'9	52'3	53'9	54'2	54'4	54'0	54'5	54'4	54'6	54'4	54'2	54'1
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	48'0	47'9	48'4	49'0	49'6	50'2	50'2	50'3	51'0	51'4	52'6	52'3
	13	49'8	50'4	50'9	52'0	52'0	52'0	52'0	51'5	51'4	51'8	52'2	52'5
	14	51'1	51'6	52'5	53'2	53'1	53'1	53'0	53'0	53'2	53'5	54'2	51'3
	15	49'5	50'1	50'2	50'1	50'0	49'8	49'6	50'0	50'3	50'4	50'6	51'2
	16	46'3	46'6	46'9	47'4	47'6	48'2	48'2	48'7	48'5	47'8	48'0	48'2
	17	48'6	48'6	49'0	48'6	48'6	49'0	49'2	49'3	49'2	48'8	48'4	47'7
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19 <sup>b</sup>	41'6	41'6	41'8	42'2	42'6	42'8	43'5	44'2	44'5	44'6	46'0	47'2
	20 <sup>b</sup>	50'3	49'5	49'4	49'1	49'4	49'6	50'2	50'7	51'0	51'2	51'0	51'5
	21 <sup>b</sup>	52'4	52'4	53'0	53'2	53'2	54'2	54'5	54'5	55'6	57'0	58'2	58'8
	22	61'7	61'7	61'0	60'6	60'4	60'3	60'0	60'0	60'0	59'6	59'6	59'2
	23	53'5	53'5	52'8	52'4	52'3	53'0	53'6	54'0	54'2	54'5	55'2	54'8
	24	50'2	50'8	51'2	51'7	52'2	53'0	53'3	53'6	53'4	54'2	54'7	55'0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	52'2	52'2	52'2	52'2	53'1	51'0	51'7	55'7	56'2	57'1	57'5	58'0
	27	55'3	55'4	55'3	55'7	55'5	55'2	54'7	54'5	54'5	54'6	54'7	54'5
	28	49'2	50'2	50'5	50'9	51'3	52'0	52'2	52'2	52'1	52'2	52'0	52'0
	29	49'5	49'5	49'2	49'2	49'2	49'2	49'6	49'8	50'1	51'0	51'2	50'7
	30	49'5	49'6	49'7	50'6	51'0	51'1	51'1	51'2	51'6	52'1	52'4	52'2
Hourly Means	50'22	50'42	50'76	51'10	51'42	51'78	52'01	52'18	52'39	52'69	52'96	52'96	

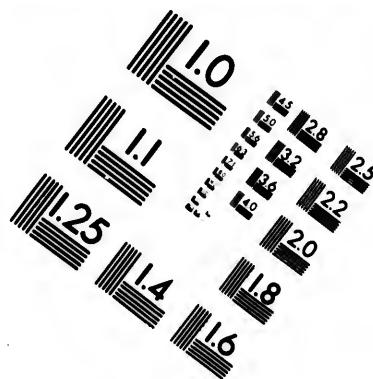
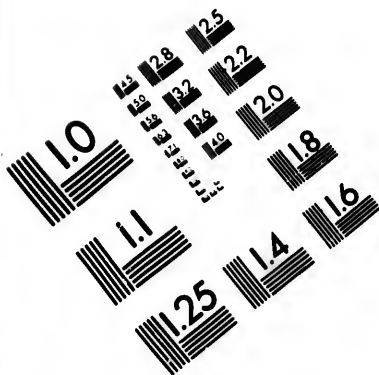
\* Four minutes late.

<sup>b</sup> Not included in the Means, on account of disturbance.

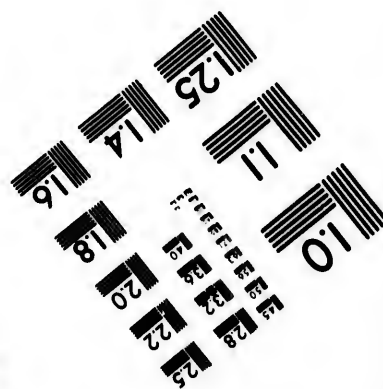
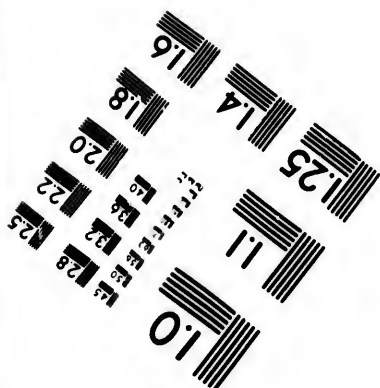
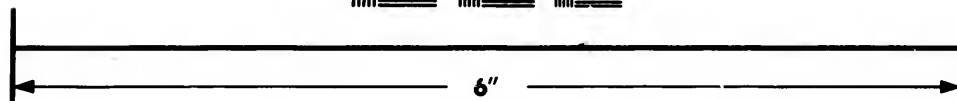
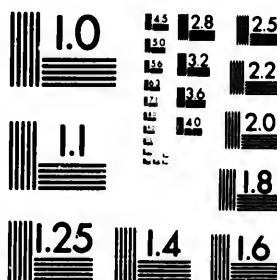
\* Seven minutes late.







**IMAGE EVALUATION  
TEST TARGET (MT-3)**



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22



VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	194'8	191'7	191'8	188'5	187'4	188'8	190'1	190'6	190'5	191'9	191'9	191'9
2	—	—	—	—	—	—	—	—	—	—	—	—
3	194'7	191'1	188'2	186'3	185'4	184'4	185'0	186'4	187'2	188'2	188'8	188'7
4	189'6	187'4	185'0	182'5	180'9	180'3	180'5	181'2	181'1	181'5	180'9	181'4
5	185'9	184'9	182'8	180'2	176'2	174'9	176'2	175'0	175'0	176'3	175'7	175'6
6	183'7	183'7	181'5	179'4	176'6	174'8	171'7	171'0	171'4	171'4	172'5	171'8
7 <sup>a</sup>	176'5	176'5	174'1	170'3	167'2	166'8	165'7	164'6	166'2	167'3	168'5	168'9
8 <sup>a</sup>	121'5	143'6	160'9	164'2	164'2	170'7	175'5	177'5	175'5	176'4	175'4	174'2
9	—	—	—	—	—	—	—	—	—	—	—	—
10	178'4	175'8	175'8	173'4	168'9	169'9	170'5	172'1	166'5	166'5	170'3	170'2
11	171'0	171'7	172'2	171'3	167'5	164'8	163'9	164'8	164'5	165'5	164'6	166'5
12	168'3	167'5	165'7	162'6	162'6	162'1	161'9	161'1	161'0 <sup>b</sup>	162'1	163'4	163'3
13	167'1	166'3	163'5	162'1	162'1	162'6	163'9	165'3	166'5	167'9	164'9	164'0
14	169'2	169'2	168'0	166'1	164'8	164'8	163'9	165'4	168'2	166'3	165'6	166'9
15	167'9	161'1	163'8	160'9	160'1	162'3	164'7	165'9	169'5	168'2	166'0	162'8
16	—	—	—	—	—	—	—	—	—	—	—	—
17	174'7	173'1	170'8	169'3	169'2	169'4	170'5	173'5	173'0	173'0	173'0	172'7
18	174'4	171'8	169'9	169'3	167'0	168'3	166'4	166'4	166'4	164'9	164'0	165'3
19	169'4	166'5	167'1	167'1	163'3	161'7	161'7	161'0	162'0	161'7	161'7	164'4
20	169'6	169'5	169'1	166'5	165'3	163'8	164'4	168'8	169'8 <sup>d</sup>	171'6	171'3	173'8
21	170'1	172'4	171'8	173'1	171'1	171'1	171'1	170'3	172'3	173'4	172'0	172'9
22	172'6	172'0	171'2	171'8	171'3	167'3	165'8	165'4	165'4	166'2	166'2	166'2
23	—	—	—	—	—	—	—	—	—	—	—	—
24	169'6	168'9	168'9	167'9	167'9	168'6	167'1	167'1	167'1	167'3	167'3	169'1
25	171'6	171'0	167'9	167'5	167'4	164'9	162'7	162'7	162'8	163'3	163'3	166'7
26	175'9	173'6	172'4	171'0	170'4	170'4	172'5	172'1	171'4	174'2	176'4	176'5
27	178'8	176'8	174'6	172'9	172'2	170'2	169'9	170'5	172'3	172'3	173'9	180'1
28 <sup>a</sup>	171'9	170'7	171'9	171'9	169'6	171'4	171'3	171'8	169'8	168'8	168'4	169'5
29	162'6	165'7	164'4	161'0	163'5	164'4	161'9	162'3	163'5	162'1	164'2	164'1
30	—	—	—	—	—	—	—	—	—	—	—	—
31	173'0	173'3	174'4	173'7	173'2	172'6	173'4	173'4	178'5	178'5	181'8	181'6
Hourly Means	175'34	174'13	173'08	171'50	170'19	169'67	169'55	170'10	170'69	170'97	171'29	171'98
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
	48'5	49'4	49'7	50'6	50'9	51'2	51'3	51'3	51'8	52'3	52'3	52'3
1	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—
3	47'6	48'3	50'0	50'4	50'7	51'1	51'2	51'4	51'7	52'5	52'8	52'8
4	50'9	52'1	53'1	53'5	53'9	54'6	54'9	55'0	55'2	55'4	55'6	55'9
5	52'8	53'3	54'0	54'8	55'8	56'4	56'8	57'2	57'6	58'3	58'8	58'7
6	54'4	55'4	55'7	56'3	57'3	58'0	58'5	59'1	59'4	60'0	60'4	60'6
7 <sup>a</sup>	57'2	58'0	59'0	60'0	60'4	61'3	61'1	61'4	61'5	61'8	62'0	62'6
8 <sup>a</sup>	60'3	59'5	59'5	59'7	60'5	60'7	60'7	60'7	60'5	61'2	61'0	61'8
9	—	—	—	—	—	—	—	—	—	—	—	—
10	58'4	58'7	59'0	59'0	59'3	60'6	61'0	61'3	61'5	62'0	62'3	62'5
11	61'3	60'7	60'7	61'0	61'5	62'2	62'7	63'4	63'5	64'0	64'3	64'2
12	62'5	62'5	62'8	64'1	64'6	65'4	65'8	66'1	66'4	66'3	66'4	66'0
13	63'2	63'4	64'2	64'6	64'8	65'0	65'0	65'0	65'2	65'5	65'5	65'5
14	62'5	62'0	62'2	62'7	63'5	64'0	64'0	63'7	63'7	63'7	64'1	63'9
15	59'7	60'2	60'7	61'3	62'3	62'7	63'1	63'6	64'1	64'7	65'3	65'6
16	—	—	—	—	—	—	—	—	—	—	—	—
17	60'2	60'4	60'5	61'1	61'7	62'5	62'5	63'3	63'6	63'9	64'5	64'4
18	60'2	60'5	60'9	61'4	61'8	62'6	63'0	63'6	64'3	64'6	64'9	65'4
19	61'5	61'6	61'9	63'0	63'0	63'4	63'6	64'2	64'5	65'0	65'5	65'6
20	61'0	61'2	61'6	62'0	62'5	62'7	63'0	63'3	63'4	63'6	63'8	63'7
21	59'6	59'2	59'0	59'2	59'0	59'0	59'7	60'5	60'9	61'3	61'5	61'7
22	59'7	60'2	60'7	60'9	61'3	61'8	62'3	62'7	63'4	63'6	63'8	64'0
23	—	—	—	—	—	—	—	—	—	—	—	—
24	61'3	61'1	61'1	61'0	61'0	61'3	61'4	61'6	61'3	62'0	62'4	62'5
25	60'4	60'4	60'9	61'4	62'1	62'7	62'9	63'5	64'3	64'6	64'6	64'6
26	58'3	58'7	58'7	59'0	59'1	59'2	59'2	58'3	58'5	59'2	59'2	59'3
27	56'2	56'7	57'8	58'2	59'0	59'0	59'2	59'7	59'9	60'3	60'7	61'0
28 <sup>a</sup>	58'4	58'6	58'5	58'8	59'2	59'7	60'3	61'3	61'6	63'3	63'7	64'3
29	64'5	64'2	63'4	63'8	64'5	64'7	64'8	64'7	64'8	65'1	65'3	65'3
30	—	—	—	—	—	—	—	—	—	—	—	—
31	59'0	58'5	58'2	58'1	57'8	57'5	57'3	57'1	56'5	56'4	56'3	56'5
Hourly Means	58'42	58'64	58'99	59'45	59'89	60'33	60'57	60'85	61'11	61'49	61'75	61'83

\* Omitted in the Means, on account of disturbance.

\* Seven minutes late.

\* Nine minutes late.

Temperature, 1' 64.

	10h.	11h.
9	191'9	191'9
2	188'8	188'7
5	180'9	181'4
3	175'7	175'6
4	171'8	171'8
3	168'5	168'9
4	175'4	174'2
5	170'3	170'2
5	164'6	166'5
1	163'4	163'3
9	164'9	164'0
3	165'6	166'9
2	166'0	162'8
0	173'0	172'7
9	164'0	166'3
7	161'7	164'4
6	171'3	173'8
4	172'0	172'9
2	166'2	166'2
3	167'3	168'1
3	163'3	166'7
2	176'4	176'5
3	173'9	180'1
8	168'4	169'5
1	164'2	164'1
5	181'8	181'6
97	171'29	171'98

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.

	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
9	193'1	193'0	191'3	189'0	189'1	188'9	194'3	194'7	194'7	193'4	193'4	193'2	191'58
2	189'0	189'4	187'2	187'0	186'5	185'9	186'8	187'0	187'0	187'3	189'6	189'6	187'78
5	181'4	181'4	182'0	182'5	182'5	182'5	183'2	184'0	182'8	183'8	185'4	186'0	182'91
3	175'6	175'9	176'7	177'9	177'9	178'1	178'1	177'8	178'6	178'5	178'6	183'7	178'17
4	171'8	171'8	173'5	173'8	172'6	173'7	173'7	171'9	170'1	168'0	172'6	176'5	174'15
3	170'0	174'4	183'8	175'6	171'9	176'9	123'5	—	46'2	46'1	118'6	110'6	153'49
4	174'2	174'2	174'3	173'7	175'0	175'3	—	—	—	—	—	—	—
5	170'2	170'2	169'0	170'2	170'2	170'3	170'3	166'9	170'3	171'3	171'3	171'7	170'84
5	166'8	166'8	166'8	167'2	167'2	167'8	167'8	167'4	167'8	169'0	162'5	168'4	167'24
1	163'4	164'6	163'8	163'6	162'2	164'0	164'7	164'5	165'8	165'2	166'5	166'5	164'01
9	163'0	162'4	167'5	163'7	163'7	163'7	165'1	165'1	168'1	168'1	168'9	168'6	165'10
3	164'9	165'2	165'1	165'7	165'7	165'7	165'7	168'8	169'3	169'3	161'5	158'5	165'99
2	162'8	170'4	168'6	169'7	170'0	170'9	—	—	—	—	—	—	—
0	173'0	175'0	170'0	176'0	170'4	173'6	168'8	171'1	171'1	172'2	173'1	174'4	167'35
9	164'0	165'3	164'9	166'3	151'7	158'7	163'1	166'9	158'5	159'5	165'3	166'5	171'57
7	161'7	165'8	165'5	162'3	163'9	165'5	168'0	166'3	163'3	164'4	165'0	164'7	165'30
6	171'3	168'3	167'2	165'1	166'8	165'4	161'0	162'5	167'6	168'4	169'3	168'6	164'55
4	172'0	172'6	171'5	173'1	173'1	172'2	169'5	171'2	171'2	170'9	172'2	173'2	167'60
2	166'2	166'2	166'3	166'7	166'3	166'4	—	—	—	—	—	—	—
3	167'3	167'1	167'1	166'6	166'8	168'3	168'6	168'2	168'7	171'6	171'6	172'9	167'54
3	163'3	169'0	168'7	168'7	168'7	168'4	169'4	170'8	172'0	172'4	173'4	174'9	168'35
2	176'4	174'0	173'9	174'6	175'0	175'7	175'7	175'9	175'6	175'6	178'9	180'7	168'12
3	178'1	173'9	174'8	174'9	174'8	161'0	164'2	173'4	174'9	171'4	170'0	167'6	174'49
8	168'4	164'6	162'3	161'8	160'2	161'1	159'7	141'2	98'8	130'0	132'0	151'8	172'68
1	164'2	164'1	164'5	164'9	164'7	164'7	—	—	—	—	—	—	159'62
5	181'8	179'1	178'8	181'0	179'5	178'5	173'9	171'4	171'7	172'6	172'6	174'4	165'97
97	171'29	171'85	171'40	171'76	170'84	170'86	171'45	172'33	172'12	172'33	173'01	174'10	177'37
171'76	171'85	171'40	171'76	170'84	170'86	171'45	172'33	172'12	172'33	173'01	174'10	171'76	171'76

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

	52'3	52'0	51'8	51'6	51'4	51'2	47'2	47'4	47'4	47'5	47'6	47'7	50'28
3	52'3	52'3	53'1	53'2	53'1	52'5	52'3	52'2	51'6	51'2	50'8	50'2	51'53
4	52'8	52'8	55'4	55'2	54'8	54'4	54'0	53'8	53'5	53'7	53'1	52'8	54'26
5	55'6	55'6	58'0	57'8	57'3	57'0	56'8	56'8	56'8	56'3	56'2	54'6	56'63
0	60'4	60'4	60'0	60'2	60'0	60'0	59'8	59'8	59'0	58'2	57'8	57'2	58'67
3	62'6	62'0	62'2	61'1	60'9	61'3	61'3	—	61'7	61'6	61'0	61'3	61'01
2	61'7	61'5	61'3	60'8	60'5	60'4	—	—	—	—	—	—	60'28
0	62'5	62'3	62'1	62'7	62'7	61'9	59'4	59'1	59'0	59'0	59'0	59'0	60'28
0	63'8	63'8	63'6	63'5	63'5	63'3	61'7	61'6	61'6	61'5	61'5	61'2	62'95
3	66'4	66'0	65'3	65'1	65'6	65'4	63'0	63'2	63'4	63'8	63'9	62'5	62'95
5	65'5	65'5	65'3	65'1	65'6	65'4	64'8	64'3	64'3	64'3	64'1	63'4	64'85
7	64'1	63'9	63'7	63'5	63'5	63'3	63'5	63'1	62'5	61'9	61'5	61'1	64'23
7	65'3	65'6	65'7	65'5	64'7	64'2	62'5	61'8	61'4	60'6	60'5	60'0	62'87
9	64'5	64'4	63'7	63'6	63'4	63'0	62'4	61'7	61'3	60'7	60'5	60'3	62'97
6	64'9	65'4	65'4	65'2	65'0	65'2	62'5	62'3	62'0	61'5	61'0	60'5	62'52
0	65'5	65'6	65'5	65'3	64'5	64'1	64'8	63'7	62'9	62'5	62'3	61'8	63'47
6	63'8	63'7	63'5	63'3	63'1	62'7	63'5	63'5	62'7	62'4	61'8	61'5	63'70
3	61'5	61'7	61'5	61'4	61'3	60'7	62'2	62'0	61'3	60'8	60'6	60'0	62'40
6	63'8	63'8	63'6	63'7	63'5	63'5	60'6	60'6	60'4	60'4	60'0	60'0	60'45
0	62'4	62'5	62'7	62'5	62'5	62'2	62'3	62'3	62'0	61'5	61'1	60'7	61'68
6	64'6	64'4	64'7	64'0	63'5	63'1	62'2	61'5	60'4	59'5	59'2	58'4	62'41
2	59'3	59'3	59'2	59'0	58'6	58'2	58'0	57'7	57'2	56'6	56'3	55'7	58'41
3	60'7	61'0	60'8	61'0	60'7	60'0	60'0	59'5	59'0	59'0	59'0	58'4	59'47
3	63'7	64'3	64'5	66'5	66'7	66'7	66'7	66'7	66'3	65'7	65'5	64'9	63'29
1	65'3	65'3	—	—	—	—	60'3	60'0	59'8	59'6	59'2	58'5	63'29
4	56'3	56'5	56'0	55'2	55'0	54'7	60'3	60'0	59'8	59'6	59'2	58'5	63'29
49	61'75	61'83	61'50	61'37	61'13	60'80	60'05	59'82	59'45	59'10	58'91	58'39	60'31

\* Five minutes late.

\* Four minutes late.

minutes late.

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.												
Mean Göttingen Time. } JUNE.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	178'4	177'4	175'6	174'0	171'6	171'6	174'8	172'5	172'8	175'2	177'7	178'4
2	164'8	167'2	169'2	169'5	168'6	166'0	164'4	165'0	166'4	168'3	166'2	165'8
3	165'3	166'9	167'0	165'9	164'8	166'0	164'4	163'3	163'1	164'3	165'7	167'9
4	168'8	167'7	166'6	166'6	166'3	165'0	165'0	165'0	166'1	166'2	166'2	166'3
5	173'0	172'4	171'8	171'8	172'4	171'1	168'9	168'6	170'3	169'4	167'7	166'6
6	—	—	—	—	—	—	—	—	—	—	—	—
7	168'7	166'4	164'8	163'1	161'0	159'6	164'2	160'5	161'8	160'3	161'1	160'1
8	169'8	168'1	167'0	167'9	167'2	168'3	167'8	167'1	166'3	166'8	167'0	167'0
9	166'6	166'1	165'8	164'0	163'4	163'1	162'8	162'8	161'9	165'4	158'4	155'0
10	157'6	154'9	157'3	157'3	154'9	155'7	157'8	162'6	162'6	162'2	161'1	163'8
11	163'3	161'6	160'9	157'1	154'8	157'0	160'4	160'4	163'1	163'5	166'2	166'7
12	168'6	168'6	166'8	165'2	166'4	166'5	164'7	166'7	167'8	166'1	168'0	170'8
13	—	—	—	—	—	—	—	—	—	—	—	—
14	170'3	166'8	168'6	170'4	173'0	172'4	180'7	184'4	189'1	189'7	192'3	185'4
15	182'8	182'9	183'1	182'0	179'6	179'8	179'8	178'7	175'0	176'4	174'7	173'2
16	172'1	172'2	171'0	170'8	169'6	167'6	166'3	165'4	165'2	166'1	169'7	169'6
17	169'1	169'5	167'1	163'3	162'8	164'2	165'0	167'0	165'7	166'0	165'4	164'1
18	170'0	169'3	167'8	165'5	163'0	160'9	159'9	161'0	163'1	163'1	165'2	165'0
19	166'2	165'4	165'2	165'0	164'8	162'5	161'0	160'7	162'2	163'9	163'3	162'3
20	—	—	—	—	—	—	—	—	—	—	—	—
21	163'1	162'5	161'4	163'9	157'8	155'8	155'8	155'8	157'0	157'8	158'4	159'5
22	163'0	162'5	162'5	161'8	161'8	159'5	158'2	156'3	157'5	159'1	159'4	158'8
23	161'8	161'3	159'4	158'1	157'4	154'8	154'8	154'8	155'5	155'8	155'3	154'3
24	158'9	158'3	156'3	155'6	154'9	152'3	151'8	150'3	149'6	150'5	150'2	149'6
25	156'4	155'2	155'8	155'6	151'8	150'4	150'0	150'0	150'4	150'4	149'5	147'8
26	151'8	151'6	148'6	148'6	147'5	145'8	145'1	144'8	144'2	145'6	146'0	145'5
27	—	—	—	—	—	—	—	—	—	—	—	—
28	149'9	149'9	151'2	148'3	147'4	147'4	147'4	148'1	146'7	145'8	147'0	148'9
29	152'8	152'8	152'5	152'8	153'0	151'8	150'6	148'9	146'0	146'8	149'0	149'5
30	154'4	154'4	152'2	150'4	149'5	147'5	147'1	148'8	148'8	149'7	152'1	151'8
Hourly Means	164'90	164'30	163'67	162'87	161'74	160'87	161'10	161'13	161'47	162'09	162'52	162'10
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
JUNE.	1	2	3	4	5	6	7	8	9	10	11	12
	55'3	55'3	55'3	56'0	56'5	56'5	57'4	59'0	59'6	59'8	60'2	60'0
1	55'3	55'3	55'3	56'0	56'5	56'5	57'4	59'0	59'6	59'8	60'2	60'0
2	59'2	59'2	59'2	59'5	60'1	61'0	61'4	61'6	61'5	61'8	62'3	63'0
3	60'0	61'0	61'4	61'3	61'3	61'6	62'1	62'5	62'8	63'5	63'6	63'6
4	61'3	61'0	61'6	61'6	62'3	63'0	62'6	62'7	62'6	63'1	63'1	63'1
5	58'4	58'4	58'2	58'6	59'1	59'2	59'4	60'2	60'2	60'8	61'4	61'4
6	—	—	—	—	—	—	—	—	—	—	—	—
7	60'0	60'0	60'4	61'0	61'7	62'5	63'0	63'5	63'7	64'7	65'5	65'9
8	62'3	62'3	62'2	62'1	62'3	62'3	62'5	62'6	62'7	63'3	63'5	63'5
9	61'5	61'5	61'6	62'3	62'5	63'7	64'3	64'7	65'6	66'6	67'5	68'5
10	66'6	66'6	66'6	66'6	66'6	66'6	66'7	66'5	66'6	66'7	66'7	66'7
11	64'3	64'5	64'8	65'0	65'5	66'0	66'0	65'9	65'9	65'7	65'7	65'5
12	60'5	60'5	61'0	61'1	61'1	61'7	61'7	62'0	62'3	62'6	63'3	63'6
13	—	—	—	—	—	—	—	—	—	—	—	—
14	59'0	59'3	59'2	59'0	58'8	58'8	58'0	57'6	57'2	57'1	57'0	56'9
15	53'3	53'3	53'8	53'8	53'8	54'2	54'5	54'7	55'5	56'7	57'7	58'6
16	59'0	58'7	59'1	59'5	60'0	60'4	60'6	60'5	60'6	61'0	61'4	61'2
17	59'2	59'2	59'3	60'0	60'4	60'5	60'6	61'0	61'3	61'9	62'5	63'3
18	59'0	59'3	60'0	60'2	61'5	62'1	63'4	63'3	63'5	64'0	64'2	64'2
19	61'8	62'0	61'7	61'7	61'8	62'4	62'5	62'8	63'2	63'3	63'5	63'7
20	—	—	—	—	—	—	—	—	—	—	—	—
21	62'4	62'5	62'7	63'4	64'2	64'5	64'6	64'9	65'2	65'3	65'5	65'5
22	62'6	62'5	62'1	62'7	63'2	63'5	63'7	64'4	64'7	65'5	65'5	65'7
23	63'0	63'5	63'9	64'8	65'7	66'3	66'5	66'5	66'8	67'3	68'3	68'5
24	65'5	65'7	66'3	66'6	67'5	68'2	68'5	68'7	69'3	70'0	70'3	70'4
25	65'8	66'4	66'6	66'9	67'4	68'0	68'5	69'3	69'7	70'6	71'2	71'5
26	68'5	68'2	69'7	70'4	71'0	71'5	72'0	72'4	72'5	73'0	73'5	73'7
27	—	—	—	—	—	—	—	—	—	—	—	—
28	70'5	70'1	69'7	69'7	70'3	70'4	70'5	70'5	71'2	71'6	72'0	72'3
29	67'6	67'4	67'5	67'8	68'3	68'7	69'3	69'8	70'1	70'7	70'7	70'9
30	67'0	67'0	67'5	68'0	68'9	69'5	69'7	70'2	70'5	70'7	71'3	71'1
Hourly Means	62'06	62'13	62'36	62'68	63'14	63'58	63'85	64'15	64'43	64'90	65'28	65'47

\* Nine minutes late.

b Three minutes late.



e of Temperature, 1°.64.

9h.	10h.	11h.
175.2	177.7	178.4
168.3	166.2	165.8
164.3	165.7	167.9
166.2	166.2	166.3
169.4	167.7	166.6
160.3	161.1	160.1
166.8	167.0	167.0
165.4	158.4	155.0
162.2	161.1	163.8
163.5	169.0	166.7
166.1	168.0	170.8
189.7	192.3	185.4
176.4	174.7	173.2
166.1	169.7	169.6
166.0	165.4	164.1
163.1	165.2	165.0
163.9	163.3	162.3
157.8	158.4	159.5
159.1	159.4	159.8
155.8	155.3	154.3
150.5	150.2	149.6
150.4	149.5	147.8
145.6	146.0	145.5
145.8	147.0	148.9
146.8	149.0	149.5
149.7	152.1	151.8
162.09	162.52	162.10

VERTICAL FORCE.

One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°.64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
182.6	175.8	174.6	171.7	169.6	170.4	170.4	170.2	170.2	170.4	170.4	167.7	173.50
165.8	165.1	165.8	165.6	165.6	166.2	166.2	165.6	164.3	160.3	161.7	163.4	165.71
167.9	167.3	165.7	165.0	167.3	167.3	166.6	162.0	164.1	164.5	167.8	168.9	165.79
166.3	166.3	166.3	167.8	167.8	168.6	167.5	168.9	170.4	171.8	173.1	173.1	167.65
166.2	166.4	166.6	166.0	166.9	167.7	—	—	—	—	—	—	168.71
159.8	160.5	161.4	169.1	169.2	161.2	161.2	158.8	154.4	159.0	168.7	170.7	162.56
166.7	167.0	164.1	164.5	166.0	166.0	166.6	166.7	165.3	164.8	162.5	165.0	166.48
156.7	154.9	154.9	155.5	155.9	155.9	153.3	155.5	155.5	155.3	157.6	157.6	159.33
167.1	166.0	168.9	163.1	161.8	158.7	159.5	156.9	154.8	155.8	157.5	161.5	159.97
166.7	167.3	171.7	167.9	166.7	166.4	166.4	166.9	167.1	167.7	164.5	168.6	164.40
173.1	173.3	181.9	170.0	180.9	167.7	—	—	—	—	—	—	167.55
182.6	182.6	178.5	180.2	179.0	177.7	149.3	148.3	157.2	169.0	172.1	172.3	178.47
172.3	172.3	169.2	170.0	169.3	170.8	171.8	172.8	172.8	172.8	174.7	176.3	175.55
169.6	168.6	168.9	168.6	168.0	167.9	167.7	169.4	166.6 <sup>b</sup>	166.2	170.5	170.5	168.59
164.5	164.5	162.8	163.6	163.6	159.4	163.8	164.9	165.0	165.0	169.3	169.2	165.20
165.8	164.4	164.6	162.0	162.1	161.2	161.2	162.8	162.8	164.2	165.4	165.6	164.00
162.5	161.3	161.3	161.3	163.6	163.6	—	—	—	—	—	—	163.60
159.9	159.9	158.0	156.2	159.2	159.7	158.5	159.4	161.3	160.7	162.9	162.9	159.47
160.2	160.2	158.2	158.5	158.5	158.5	158.5	158.7	158.7	159.0	161.7	163.1	159.80
153.1	153.1	153.1	148.6	148.6	151.0	152.2	153.2	154.4	155.1	155.5	157.1	154.93
149.6	148.9	148.9	148.9	149.9	151.1	151.9	151.6	152.4	154.5 <sup>d</sup>	155.7	156.4	152.42
147.8	148.1	149.0	149.5	149.6	150.5	150.6	151.3	152.6	152.6	152.2	152.0	151.21
145.7	145.1	144.6	144.6	144.2	144.2	—	—	—	—	—	—	146.16
148.8	148.4	148.9	149.7	147.8	148.6	145.3	146.0	146.2	146.2	153.3	153.2	148.35
149.5	148.6	148.6	149.2	149.2	149.7	149.5	147.9	151.3	143.1	147.6	155.1	149.82
151.8	152.5	152.5	151.5	147.3	145.3	147.5	148.0 <sup>d</sup>	152.7	154.7	156.9	158.7	151.09
162.41	161.86	161.88	161.10	161.45	160.51	159.65	159.87	160.61	161.16	162.91	164.31	161.94

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

59.8	60.2	60.0
61.8	62.3	63.0
63.5	63.6	63.6
63.1	63.1	63.1
60.8	61.4	61.4
61.7	65.5	65.9
63.3	63.5	63.5
66.6	67.5	68.5
66.7	66.7	66.7
65.7	65.7	65.5
62.6	63.3	63.6
57.1	57.0	56.9
56.7	57.7	58.6
61.0	61.4	61.2
61.9	62.5	63.3
64.0	64.2	64.2
63.3	63.5	63.7
65.3	65.5	65.5
67.3	68.3	68.5
70.0	70.3	70.4
70.6	71.2	71.5
73.0	73.5	73.7
71.6	72.0	72.3
70.7	70.7	70.9
70.7	71.3	71.1
64.90	65.28	65.47

60.1	60.2	60.2	60.3	60.3	60.0	60.0	60.0	60.0	59.6	59.4	59.2	58.76
63.5	63.5	63.2	62.8	62.7	62.2	62.3	61.6	61.5	61.3	60.7	60.2	61.48
63.4	63.0	62.8	63.0	62.6	62.5	62.4	62.0	62.0	62.0	61.7	61.3	62.22
62.7	62.5	62.1	61.7	61.2	61.0	61.0	60.0	59.6	59.3	58.8	58.5	61.52
61.8	61.8	61.8	61.6	61.4	61.0	—	—	—	—	—	—	60.30
65.7	65.5	65.4	64.8	61.4	63.9	63.7	63.5	63.5	63.2	63.0	62.6	63.38
63.5	63.1	63.1	63.0	62.9	62.5	62.4	62.4	62.8	62.4	62.0	61.5	62.62
68.5	68.5	68.7	68.5	68.5	68.3	68.0	67.9	67.7	67.5	67.4	67.2	66.13
67.2	67.0	66.6	66.2	66.0	65.5	65.5	65.0	64.9	64.7	64.6	64.5	66.13
65.3	64.3	63.7	63.4	62.7	62.3	61.7	61.0	60.6	60.4	60.1	60.0	63.76
63.9	64.2	64.0	63.6	63.3	63.0	—	—	—	—	—	—	61.61
57.2	57.0	56.5	56.7	56.2	56.1	56.0	55.4	55.6	55.6	55.4	54.2	57.07
59.1	59.2	60.0	60.2	59.7	59.0	59.0	58.5	58.4	58.0	57.8	57.4	56.92
61.4	61.2	61.0	60.6	60.4	60.4	60.0	59.8	59.2	58.5	58.2	57.4	60.00
63.5	63.5	63.5	63.3	62.7	62.5	61.8	61.4	60.7	60.2	59.8	59.0	61.30
64.0	63.7	63.5	63.5	63.2	63.0	63.0	63.0	63.0	62.6	62.5	62.4	62.59
63.9	64.1	64.0	64.4	63.5	63.2	—	—	—	—	—	—	62.58
65.5	65.5	65.5	65.7	65.5	65.3	65.3	64.5	64.1	63.6	63.4	62.8	64.47
65.8	65.6	66.0	65.6	65.5	65.2	64.7	64.3	64.0	63.8	63.6	63.5	64.32
68.7	68.6	68.6	70.0	70.0	69.4	68.5	68.0	67.3	67.0	66.7	66.1	67.08
70.4	70.6	70.5	70.5	69.7	69.3	68.5	68.1	67.8	67.3	66.7	66.3	68.15
71.5	71.4	70.7	70.3	69.8	69.6	69.3	68.7	68.6	68.5	68.5	68.3	69.05
73.6	73.3	73.2	73.1	72.7	72.6	—	—	—	—	—	—	71.97
72.3	72.5	71.7	71.4	70.8	70.5	70.1	69.6	69.1	68.7	68.4	68.4	70.51
70.9	71.0	70.6	70.1	69.9	69.6	69.0	68.3	67.5	67.0	67.0	66.7	69.02
71.4	71.3	71.0	70.5	70.0	69.5	69.0	68.4	67.7	67.2	66.7	66.0	69.17
65.57	65.47	65.30	65.18	64.83	64.52	64.06	63.69	63.43	63.12	62.87	62.47	63.94

\* Seven minutes late.

\* Five minutes late.

VERTICAL FORCE.												
One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
JULY. 1	157.5	157.5	154.5	151.9	150.5	150.4	149.5	146.3	147.5	146.8	147.6	147.7
2	152.8	152.3	151.5	149.0	146.3	144.2	142.9	140.9	138.9	138.9	140.5	141.8
3	149.8	149.2	148.6	148.0	142.5	138.8	138.3	138.3	138.7	138.7	138.2	139.5
4	—	—	—	—	—	—	—	—	—	—	—	—
5	145.4	146.1	144.0	144.0	140.6	139.6	137.0	138.5	138.1	137.0	136.2	136.6
6	142.5	143.6	144.5	143.9	143.9	143.2	142.2	141.6	141.9	141.9	142.3	142.3
7	134.4	138.3	138.3	138.7	139.8	139.6	137.1	137.1	140.0	140.0	138.3	136.9
8	139.7	138.6	137.6	137.6	135.0	133.0	133.3	131.6	133.7	134.5	135.3	135.3
9	139.9	139.1	138.6	135.2	132.1	130.7	132.6	136.2	138.5	144.7	155.4	161.0
10	143.0	143.0	139.9	139.9	139.2	137.0	139.1	138.9	143.6	143.6	143.6	141.1
11	—	—	—	—	—	—	—	—	—	—	—	—
12	139.3	138.5	140.1	136.7	135.8	134.5	136.9	136.9	139.9	138.9	137.7	137.8
13	138.4	138.4	139.2	138.4	133.8	132.9	132.0	131.3	130.6	131.4	134.1	135.7
14	140.3	140.3	142.9	143.2	141.1	141.6	142.7	142.7	144.5	145.5	145.2	148.4
15	153.4	151.8	151.1	150.1	149.2	147.3	147.0	146.0	145.1	145.2	144.6	145.7
16	148.6	147.4	145.5	143.1	141.0	139.8	139.1	136.7	137.6	137.6	138.5	137.0
17	139.4	136.3	135.6	138.3	136.5	135.2	134.2	133.4	134.1	135.5	140.1	142.7
18	—	—	—	—	—	—	—	—	—	—	—	—
19	136.7	134.9	135.3	133.5	129.0	128.2	125.9	124.9	127.9	127.9	127.5	129.1
20	131.3	131.6	131.3	132.4	132.4	132.2	131.7	131.7	132.5	135.1	135.1	135.7
21	138.3	138.3	138.3	138.3	135.8	134.8	134.8	133.7	134.9	134.9	134.6	136.0
22	133.5	135.3	134.8	136.4	138.7	137.8	135.9	134.2	135.1	134.7	135.6	136.5
23	143.6	142.9	142.9	142.1	142.1	142.1	139.6	140.6	140.8	144.1	144.2	146.3
24	148.7	148.7	147.4	145.8	145.3	146.3	146.3	145.5	146.3	147.6	147.6	147.7
25	—	—	—	—	—	—	—	—	—	—	—	—
26	145.6	148.2	150.2	150.3	151.0	151.9	153.6	154.1	159.0	158.1	159.6	160.5
27	160.9	159.0	159.6	158.0	156.8	155.4	154.1	154.4	155.7	157.4	155.5	157.5
28	162.2	160.5	160.5	159.0	156.4	153.1	152.6	152.9	155.2	154.9	154.9	151.9
29	160.0	158.3	156.1	154.6	153.5	153.5	151.5	152.6	153.1	153.1	152.2	152.2
30	155.4	154.7	154.7	154.7	154.9	154.9	154.8	154.8	153.8	155.4	155.1	155.0
31	158.6	156.6	154.8	153.4	153.4	153.2	150.3	151.2	151.5	153.2	151.8	151.8
Aug. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	146.13	145.78	145.35	144.67	143.25	142.33	141.63	141.18	142.31	142.77	142.92	143.49
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
JULY. 1	66.4	66.4	66.7	67.3	67.6	68.7	69.6	70.0	70.5	71.3	71.5	72.2
2	68.1	68.4	68.5	69.5	70.6	71.5	72.3	72.7	73.4	74.0	74.5	74.7
3	69.6	69.7	70.5	71.3	72.3	73.3	73.7	74.8	75.3	75.9	76.5	76.7
4	—	—	—	—	—	—	—	—	—	—	—	—
5	71.5	71.5	72.0	72.3	73.5	74.3	74.8	75.4	76.2	77.4	77.0	76.7
6	72.7	72.5	72.5	72.5	72.5	72.8	73.0	74.0	74.6	75.2	75.4	75.5
7	71.8	71.8	71.6	72.3	73.3	74.0	74.6	75.4	75.7	76.5	77.0	77.5
8	73.3	73.3	73.6	74.0	75.6	76.7	77.4	78.0	78.0	77.5	78.0	78.3
9	74.5	74.5	75.0	75.8	76.8	77.5	78.1	78.5	78.7	79.3	79.0	78.5
10	76.7	75.3	75.4	75.4	75.5	76.3	76.5	77.0	77.5	78.2	78.6	78.1
11	—	—	—	—	—	—	—	—	—	—	—	—
12	75.5	75.7	76.3	77.1	77.2	77.5	77.1	77.3	77.7	78.5	79.0	79.0
13	75.8	76.3	76.5	77.0	77.8	78.4	78.9	79.7	80.0	79.6	79.5	79.3
14	72.0	71.9	72.0	72.4	72.7	73.2	73.3	73.2	73.4	73.4	73.2	73.6
15	68.5	68.5	68.5	69.3	69.5	70.3	70.7	71.5	72.0	73.1	73.5	73.5
16	70.9	71.1	71.3	72.0	73.0	73.7	74.5	75.4	75.6	75.5	76.6	76.5
17	73.8	74.2	74.0	74.3	75.4	76.5	77.3	79.0	79.0	79.0	79.0	78.6
18	—	—	—	—	—	—	—	—	—	—	—	—
19	76.5	77.0	77.0	78.0	78.3	79.2	80.0	80.3	80.6	81.5	81.5	82.3
20	77.0	77.6	77.9	78.3	78.0	78.4	78.4	78.2	78.4	78.5	78.5	78.6
21	76.2	76.0	76.0	76.0	76.3	76.5	77.0	77.3	77.5	78.3	78.4	78.4
22	76.7	76.5	76.5	76.2	76.3	76.5	76.7	77.2	77.3	77.4	77.7	77.5
23	72.3	72.6	72.6	72.9	72.9	73.1	73.0	73.1	73.0	73.3	73.4	73.5
24	69.5	69.3	70.0	70.2	70.5	70.8	71.0	71.0	71.1	71.5	71.5	71.5
25	—	—	—	—	—	—	—	—	—	—	—	—
26	71.0	70.4	69.7	69.5	68.7	68.5	68.3	68.0	68.2	68.2	68.3	68.3
27	63.5	63.9	64.1	65.5	66.0	66.5	66.7	66.7	66.7	66.5	66.7	66.5
28	63.3	63.4	63.8	64.4	65.5	65.7	66.3	66.5	66.8	67.4	67.7	67.6
29	64.5	65.3	65.9	66.4	66.7	67.4	67.7	68.3	68.5	68.6	69.2	69.3
30	66.4	66.5	66.5	66.0	66.4	66.3	66.5	66.5	66.6	67.0	67.5	67.7
31	64.6	65.1	65.3	65.9	67.0	67.3	67.5	67.9	68.0	68.5	68.5	68.5
Aug. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	71.08	71.16	71.33	71.77	72.27	72.82	73.18	73.63	73.91	74.30	74.55	74.61

\* Omitted in the Means, on account of disturbance.

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

ture, 1°64.

10h.	11h.
147°6	147°7
140°5	141°8
138°2	139°5
—	—
136°2	136°6
142°3	142°3
138°3	136°9
135°3	135°3
155°4	161°0
143°6	141°1
—	—
137°7	137°8
134°1	135°7
145°2	148°4
144°6	145°7
138°5	137°0
140°1	142°7
—	—
127°5	129°1
135°1	135°7
134°6	135°0
135°6	136°5
144°2	146°3
147°6	147°7
—	—
159°6	160°5
155°5	157°5
154°9	154°9
152°2	152°2
155°1	155°0
151°8	151°8
—	—
142°92	143°49

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
147°2	146°6	146°6	146°9	147°0	147°1	148°0	149°7	150°8	151°6	152°8	152°8	149°78
141°8	142°3	141°7	142°0	142°7	143°6	144°1	144°3	144°3	144°5	146°4	148°7	144°43
138°0	137°7	138°2	139°3	140°0	135°0	—	—	—	—	—	—	—
—	—	—	—	—	—	144°0	144°1	144°1	143°2	143°2	144°0	141°60
137°5	138°2	138°2	138°5	138°5	140°3	140°3	140°3	133°9	130°5	138°8	140°2	139°10
142°4	142°6	140°4	140°8	141°4	140°8	141°5	141°8	142°6	142°4	140°7	132°4	141°81
136°9	135°0	135°9	138°3	135°4	136°5	138°3	137°3	138°8	140°0	140°0	140°1	137°96
135°6	135°6	132°9	132°6	134°5	135°9	136°4	136°5	136°5	136°5	138°3	139°9	135°68
163°5	165°4	161°0	98°3	139°4	122°4	137°0	80°5	132°6	143°2	131°0	—	137°68
140°9	141°2	133°7	134°2	134°3	134°3	—	—	—	—	—	—	—
—	—	—	—	—	—	136°9	133°2	128°0	130°2	133°0	138°7	137°94
137°8	137°9	133°0	134°7	135°4	136°4	127°8	124°2	131°9	135°5	140°7	139°1	136°14
135°7	135°7	134°9	137°2	137°7	135°7	136°2	137°2	138°2	140°7	141°5	141°4	136°18
147°9	146°8	147°2	148°9	146°4	146°4	142°8	143°8	143°8	145°6	152°0	153°4	145°14
144°9	145°4	145°4	145°4	145°6	145°6	145°6	145°7	145°7	146°3	147°5	148°6	147°01
137°1	138°0	137°3	137°3	136°9	138°1	137°5	138°5	139°3	137°5	138°3	137°4	139°38
144°1	145°1	143°2	138°0	136°1	136°1	—	—	—	—	—	—	—
—	—	—	—	—	—	134°2	134°9	134°9	135°9	136°7	137°6	137°42
129°1	126°7	127°7	128°6	129°0	129°4	130°0	130°8	131°3	131°6	131°3	131°3	129°90
135°7	135°0	133°7	134°4	133°2	131°8	133°9	134°2	134°2	131°4	135°2	137°1	133°70
134°2	134°4	134°4	133°3	132°5	133°7	120°9	128°1	129°5	132°6	134°8	135°6	133°99
136°5	136°7	137°4	137°4	132°2	119°5	134°3	136°9	135°2	142°9	143°7	145°2	136°10
145°1	143°9	143°9	141°1	145°1	147°3	145°7	145°7	145°7	148°1	148°1	150°1	144°34
146°7	146°7	146°7	146°7	145°5	140°5	—	—	—	—	—	—	—
—	—	—	—	—	—	142°7	143°0	142°5	142°5	141°3	144°5	145°65
157°1	156°6	155°1	153°6	155°0	155°4	154°8	155°3	155°3	159°9	158°3	158°8	154°97
136°9	155°6	155°6	155°5	155°6	156°4	156°6	152°8	154°3	157°4	159°2	162°2	156°77
155°0	155°0	155°0	154°0	154°2	154°5	154°1	155°7	155°7	153°8	158°2	159°8	155°92
151°4	151°1	150°8	151°5	150°6	148°3	150°1	150°4	150°4	151°6	151°3	153°1	152°55
154°3	153°3	152°5	151°1	153°5	149°7	153°6	153°6	154°8	155°0	155°9	156°2	154°37
151°3	151°3	151°3	151°8	149°7	151°1	—	—	—	—	—	—	—
—	—	—	—	—	—	152°6	152°9	154°8	151°6	154°8	156°5	153°02
143°12	142°86	142°08	142°35	141°85	141°25	141°65	141°96	142°17	143°26	144°81	145°57	143°11

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

71°5	72°2	72°5	71°9	71°5	71°1	70°7	69°7	69°3	68°6	68°4	68°0	69°77
74°5	74°7	75°0	74°0	73°6	73°3	72°8	72°1	71°5	70°9	70°5	70°0	72°17
76°5	76°7	76°5	76°3	75°0	74°5	—	—	—	—	—	—	—
—	—	—	—	—	—	74°0	73°5	73°0	72°5	72°1	71°5	73°83
77°0	76°7	76°2	75°7	75°5	74°9	74°5	74°5	74°5	74°0	74°0	73°6	74°65
75°4	75°5	75°2	74°9	75°3	74°7	74°5	74°2	73°8	72°8	72°7	72°3	73°90
77°0	77°5	77°5	77°5	76°1	75°7	75°3	75°3	74°5	73°5	73°5	73°3	74°93
78°0	78°3	78°1	77°6	77°5	77°1	76°8	76°5	75°8	75°5	75°0	74°6	76°45
79°0	78°5	78°5	78°5	78°5	79°5	79°4	77°6	78°2	77°7	77°0	76°8	78°58
78°6	78°1	77°7	77°5	77°3	77°1	77°0	—	—	—	—	—	—
—	—	—	—	—	—	76°7	76°5	76°2	76°0	75°5	75°0	76°71
78°9	79°0	78°9	79°0	78°7	78°3	78°6	77°5	77°1	76°6	76°3	75°7	77°61
79°5	79°3	78°7	78°0	77°2	76°8	76°3	75°7	74°8	73°8	73°6	72°8	76°97
73°2	73°6	72°7	72°5	72°3	71°6	71°5	71°0	70°5	70°1	69°6	69°3	71°79
73°5	73°5	73°5	73°3	73°1	73°0	72°6	72°1	72°0	72°3	72°0	71°5	71°51
76°6	76°5	76°3	76°1	76°1	76°5	76°7	76°0	75°3	74°5	74°4	74°4	74°67
79°0	78°6	78°6	79°0	78°6	78°4	78°1	—	—	—	—	—	—
—	—	—	—	—	—	77°8	77°7	77°5	77°0	76°9	76°7	77°29
81°5	82°3	82°5	80°9	81°0	80°5	80°2	79°2	78°6	78°3	78°3	78°1	79°67
78°5	78°6	78°7	78°4	78°0	77°7	77°6	77°3	76°8	76°5	76°5	76°5	77°83
78°4	78°4	78°0	77°7	78°0	77°9	78°0	77°5	77°3	76°7	76°4	76°6	77°25
77°7	77°5	77°5	77°0	76°5	76°3	75°7	75°0	74°5	74°0	73°2	73°0	75°99
73°4	73°5	73°7	74°0	74°0	73°4	72°7	72°5	71°6	70°5	70°5	70°0	72°52
71°5	71°5	71°3	71°0	71°0	71°0	70°8	—	—	—	—	—	—
—	—	—	—	—	—	73°5	73°0	73°0	72°8	72°5	72°2	71°29
68°3	68°3	68°4	67°6	67°3	66°7	66°4	65°7	65°2	64°7	64°2	63°5	67°45
66°7	66°5	66°8	66°8	66°5	66°0	65°6	65°5	65°0	64°8	64°5	64°0	65°63
67°7	67°6	67°4	67°3	67°5	67°0	67°0	66°5	66°0	65°6	65°4	65°0	66°02
69°2	69°3	69°1	69°0	69°2	68°2	68°7	68°2	68°5	68°3	67°8	67°3	67°87
67°5	67°7	68°1	68°3	68°0	67°8	67°5	67°3	66°6	66°5	66°0	65°5	66°87
68°5	68°5	68°3	68°2	67°6	67°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	67°0	66°5	66°0	65°5	65°2	66°94
74°55	74°61	74°28	74°05	73°18	73°35	73°18	72°73	72°28	71°83	71°55	71°13	72°98

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.													
Mean (Göttingen Time.)	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
AUGUST.	2	156 <sup>5</sup>	155 <sup>0</sup>	152 <sup>5</sup>	151 <sup>9</sup>	155 <sup>1</sup>	154 <sup>9</sup>	154 <sup>1</sup>	148 <sup>8</sup>	149 <sup>6</sup>	149 <sup>6</sup>	148 <sup>6</sup>	
	3	156 <sup>0</sup>	155 <sup>0</sup>	154 <sup>4</sup>	154 <sup>5</sup>	151 <sup>3</sup>	148 <sup>8</sup>	149 <sup>6</sup>	151 <sup>1</sup>	149 <sup>8</sup>	150 <sup>2</sup>	149 <sup>3</sup>	
	4	141 <sup>4</sup>	146 <sup>5</sup>	144 <sup>1</sup>	142 <sup>0</sup>	140 <sup>6</sup>	139 <sup>3</sup>	139 <sup>3</sup>	140 <sup>1</sup>	141 <sup>8</sup>	140 <sup>7</sup>	141 <sup>9</sup>	
	5	152 <sup>0</sup>	156 <sup>0</sup>	145 <sup>0</sup>	144 <sup>3</sup>	148 <sup>2</sup>	147 <sup>1</sup>	146 <sup>1</sup>	151 <sup>5</sup>	148 <sup>2</sup>	153 <sup>5</sup>	154 <sup>7</sup>	
	6	151 <sup>9</sup>	151 <sup>9</sup>	145 <sup>8</sup>	143 <sup>2</sup>	143 <sup>9</sup>	136 <sup>9</sup>	137 <sup>4</sup>	138 <sup>5</sup>	140 <sup>1</sup>	139 <sup>8</sup>	137 <sup>9</sup>	
	7	147 <sup>4</sup>	147 <sup>2</sup>	147 <sup>9</sup>	147 <sup>9</sup>	146 <sup>8</sup>	146 <sup>7</sup>	145 <sup>6</sup>	144 <sup>9</sup>	146 <sup>8</sup>	149 <sup>1</sup>	153 <sup>7</sup>	
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	150 <sup>7</sup>	151 <sup>5</sup>	150 <sup>7</sup>	151 <sup>6</sup>	151 <sup>6</sup>	148 <sup>2</sup>	146 <sup>6</sup>	147 <sup>2</sup>	145 <sup>1</sup>	144 <sup>0</sup>	146 <sup>8</sup>	
	10	147 <sup>1</sup>	146 <sup>4</sup>	147 <sup>4</sup>	145 <sup>6</sup>	143 <sup>5</sup>	142 <sup>6</sup>	139 <sup>6</sup>	139 <sup>4</sup>	139 <sup>5</sup>	138 <sup>2</sup>	138 <sup>5</sup>	
	11	143 <sup>3</sup>	143 <sup>9</sup>	143 <sup>9</sup>	143 <sup>7</sup>	144 <sup>2</sup>	144 <sup>1</sup>	143 <sup>2</sup>	141 <sup>5</sup>	141 <sup>4</sup>	141 <sup>4</sup>	142 <sup>3</sup>	
	12	149 <sup>4</sup>	148 <sup>5</sup>	148 <sup>2</sup>	146 <sup>8</sup>	145 <sup>1</sup>	143 <sup>3</sup>	143 <sup>1</sup>	142 <sup>9</sup>	142 <sup>9</sup>	142 <sup>1</sup>	141 <sup>8</sup>	
	13	146 <sup>0</sup>	145 <sup>0</sup>	142 <sup>8</sup>	141 <sup>2</sup>	139 <sup>6</sup>	138 <sup>2</sup>	135 <sup>5</sup>	135 <sup>7</sup>	135 <sup>8</sup>	137 <sup>7</sup>	140 <sup>0</sup>	
	14	141 <sup>5</sup>	140 <sup>8</sup>	140 <sup>1</sup>	139 <sup>8</sup>	136 <sup>2</sup>	139 <sup>0</sup>	139 <sup>2</sup>	139 <sup>2</sup>	138 <sup>1</sup>	138 <sup>1</sup>	138 <sup>1</sup>	
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	138 <sup>0</sup>	137 <sup>1</sup>	131 <sup>9</sup>	133 <sup>5</sup>	132 <sup>1</sup>	132 <sup>9</sup>	131 <sup>7</sup>	129 <sup>9</sup>	131 <sup>1</sup>	132 <sup>8</sup>	134 <sup>4</sup>	
	17	137 <sup>2</sup>	135 <sup>3</sup>	133 <sup>2</sup>	132 <sup>4</sup>	131 <sup>2</sup>	130 <sup>3</sup>	131 <sup>7</sup>	131 <sup>9</sup>	133 <sup>8</sup>	134 <sup>3</sup>	136 <sup>0</sup>	
	18	145 <sup>0</sup>	145 <sup>0</sup>	144 <sup>8</sup>	142 <sup>7</sup>	141 <sup>7</sup>	145 <sup>3</sup>	143 <sup>7</sup>	145 <sup>7</sup>	148 <sup>1</sup>	149 <sup>9</sup>	148 <sup>9</sup>	
	19	159 <sup>5</sup>	159 <sup>5</sup>	157 <sup>1</sup>	157 <sup>0</sup>	157 <sup>9</sup>	158 <sup>4</sup>	157 <sup>7</sup>	157 <sup>7</sup>	157 <sup>7</sup>	157 <sup>0</sup>	155 <sup>9</sup>	
	20	155 <sup>1</sup>	153 <sup>7</sup>	153 <sup>3</sup>	153 <sup>3</sup>	151 <sup>8</sup>	150 <sup>6</sup>	152 <sup>0</sup>	151 <sup>7</sup>	151 <sup>4</sup>	150 <sup>4</sup>	150 <sup>4</sup>	
	21	155 <sup>4</sup>	155 <sup>4</sup>	152 <sup>4</sup>	151 <sup>0</sup>	150 <sup>2</sup>	150 <sup>9</sup>	150 <sup>9</sup>	151 <sup>0</sup>	151 <sup>8</sup>	149 <sup>5</sup>	151 <sup>7</sup>	
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	159 <sup>4</sup>	156 <sup>4</sup>	155 <sup>2</sup>	154 <sup>6</sup>	153 <sup>3</sup>	152 <sup>3</sup>	153 <sup>5</sup>	154 <sup>6</sup>	154 <sup>5</sup>	155 <sup>8</sup>	155 <sup>4</sup>	
	24	154 <sup>7</sup>	154 <sup>6</sup>	153 <sup>3</sup>	151 <sup>5</sup>	151 <sup>3</sup>	152 <sup>1</sup>	150 <sup>8</sup>	151 <sup>6</sup>	152 <sup>9</sup>	155 <sup>4</sup>	153 <sup>0</sup>	
	25	154 <sup>4</sup>	150 <sup>1</sup>	148 <sup>3</sup>	148 <sup>3</sup>	147 <sup>8</sup>	147 <sup>8</sup>	155 <sup>8</sup>	160 <sup>1</sup>	155 <sup>3</sup>	150 <sup>2</sup>	150 <sup>0</sup>	
	26	142 <sup>2</sup>	147 <sup>4</sup>	153 <sup>0</sup>	151 <sup>5</sup>	151 <sup>2</sup>	148 <sup>5</sup>	148 <sup>3</sup>	147 <sup>8</sup>	146 <sup>8</sup>	146 <sup>3</sup>	144 <sup>8</sup>	
	27	147 <sup>6</sup>	148 <sup>6</sup>	148 <sup>6</sup>	148 <sup>0</sup>	147 <sup>5</sup>	147 <sup>5</sup>	150 <sup>0</sup>	150 <sup>2</sup>	152 <sup>2</sup>	150 <sup>4</sup>	149 <sup>9</sup>	
	28	140 <sup>1</sup>	148 <sup>8</sup>	148 <sup>5</sup>	148 <sup>2</sup>	145 <sup>9</sup>	145 <sup>7</sup>	148 <sup>6</sup>	148 <sup>2</sup>	149 <sup>1</sup>	149 <sup>0</sup>	149 <sup>5</sup>	
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30 <sup>a</sup>	149 <sup>5</sup>	148 <sup>1</sup>	148 <sup>1</sup>	143 <sup>7</sup>	143 <sup>5</sup>	143 <sup>4</sup>	142 <sup>7</sup>	141 <sup>9</sup>	143 <sup>5</sup>	144 <sup>5</sup>	145 <sup>1</sup>	
	31 <sup>a</sup>	151 <sup>0</sup>	150 <sup>3</sup>	148 <sup>5</sup>	148 <sup>5</sup>	148 <sup>5</sup>	149 <sup>0</sup>	149 <sup>0</sup>	150 <sup>0</sup>	152 <sup>0</sup>	153 <sup>8</sup>	152 <sup>7</sup>	
	Hourly Means	148 <sup>82</sup>	149 <sup>15</sup>	147 <sup>60</sup>	146 <sup>94</sup>	146 <sup>17</sup>	145 <sup>47</sup>	145 <sup>62</sup>	145 <sup>88</sup>	145 <sup>99</sup>	146 <sup>06</sup>	146 <sup>40</sup>	146 <sup>31</sup>
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
AUGUST.	2	65 <sup>3</sup>	65 <sup>0</sup>	65 <sup>0</sup>	66 <sup>0</sup>	67 <sup>5</sup>	67 <sup>7</sup>	68 <sup>0</sup>	68 <sup>5</sup>	68 <sup>8</sup>	69 <sup>4</sup>	70 <sup>0</sup>	
	3	66 <sup>2</sup>	66 <sup>2</sup>	66 <sup>5</sup>	67 <sup>3</sup>	68 <sup>3</sup>	68 <sup>5</sup>	68 <sup>6</sup>	68 <sup>6</sup>	69 <sup>0</sup>	69 <sup>5</sup>	69 <sup>7</sup>	
	4	66 <sup>7</sup>	67 <sup>4</sup>	67 <sup>9</sup>	68 <sup>8</sup>	69 <sup>5</sup>	70 <sup>1</sup>	70 <sup>5</sup>	70 <sup>7</sup>	71 <sup>0</sup>	71 <sup>9</sup>	73 <sup>0</sup>	
	5	68 <sup>3</sup>	68 <sup>8</sup>	69 <sup>6</sup>	70 <sup>5</sup>	71 <sup>3</sup>	71 <sup>5</sup>	72 <sup>0</sup>	72 <sup>3</sup>	73 <sup>0</sup>	73 <sup>5</sup>	73 <sup>2</sup>	
	6	68 <sup>7</sup>	68 <sup>7</sup>	70 <sup>4</sup>	70 <sup>5</sup>	73 <sup>0</sup>	73 <sup>5</sup>	73 <sup>8</sup>	73 <sup>7</sup>	73 <sup>7</sup>	74 <sup>5</sup>	75 <sup>5</sup>	
	7	69 <sup>5</sup>	69 <sup>3</sup>	69 <sup>0</sup>	69 <sup>5</sup>	70 <sup>0</sup>	70 <sup>5</sup>	71 <sup>4</sup>	71 <sup>7</sup>	72 <sup>0</sup>	72 <sup>5</sup>	72 <sup>3</sup>	
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	67 <sup>2</sup>	67 <sup>0</sup>	67 <sup>0</sup>	67 <sup>3</sup>	67 <sup>5</sup>	68 <sup>5</sup>	69 <sup>1</sup>	69 <sup>6</sup>	70 <sup>6</sup>	71 <sup>5</sup>	72 <sup>0</sup>	
	10	70 <sup>5</sup>	70 <sup>6</sup>	70 <sup>6</sup>	70 <sup>6</sup>	71 <sup>6</sup>	72 <sup>6</sup>	73 <sup>3</sup>	73 <sup>4</sup>	73 <sup>7</sup>	74 <sup>5</sup>	74 <sup>5</sup>	
	11	71 <sup>9</sup>	71 <sup>7</sup>	72 <sup>0</sup>	71 <sup>8</sup>	71 <sup>7</sup>	71 <sup>8</sup>	72 <sup>2</sup>	72 <sup>4</sup>	72 <sup>5</sup>	72 <sup>5</sup>	72 <sup>5</sup>	
	12	69 <sup>0</sup>	69 <sup>6</sup>	69 <sup>4</sup>	69 <sup>4</sup>	70 <sup>5</sup>	71 <sup>5</sup>	72 <sup>0</sup>	72 <sup>5</sup>	72 <sup>8</sup>	73 <sup>5</sup>	73 <sup>8</sup>	
	13	71 <sup>2</sup>	71 <sup>5</sup>	72 <sup>1</sup>	73 <sup>2</sup>	73 <sup>5</sup>	74 <sup>4</sup>	74 <sup>7</sup>	74 <sup>5</sup>	75 <sup>0</sup>	75 <sup>0</sup>	74 <sup>7</sup>	
	14	72 <sup>5</sup>	72 <sup>5</sup>	72 <sup>7</sup>	73 <sup>4</sup>	74 <sup>3</sup>	74 <sup>5</sup>	74 <sup>7</sup>	75 <sup>4</sup>	75 <sup>6</sup>	76 <sup>0</sup>	76 <sup>3</sup>	
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	74 <sup>5</sup>	74 <sup>5</sup>	75 <sup>3</sup>	76 <sup>7</sup>	76 <sup>5</sup>	77 <sup>0</sup>	77 <sup>4</sup>	78 <sup>0</sup>	78 <sup>0</sup>	78 <sup>5</sup>	78 <sup>6</sup>	
	17	74 <sup>5</sup>	75 <sup>0</sup>	75 <sup>3</sup>	75 <sup>4</sup>	75 <sup>3</sup>	75 <sup>5</sup>	75 <sup>5</sup>	75 <sup>5</sup>	75 <sup>7</sup>	75 <sup>5</sup>	75 <sup>5</sup>	
	18	69 <sup>5</sup>	69 <sup>4</sup>	69 <sup>5</sup>	69 <sup>5</sup>	69 <sup>3</sup>	69 <sup>5</sup>	69 <sup>5</sup>	69 <sup>5</sup>	69 <sup>5</sup>	69 <sup>5</sup>	69 <sup>7</sup>	
	19	64 <sup>4</sup>	64 <sup>0</sup>	64 <sup>1</sup>	63 <sup>5</sup>	64 <sup>3</sup>	64 <sup>4</sup>	64 <sup>5</sup>	64 <sup>7</sup>	64 <sup>7</sup>	65 <sup>3</sup>	65 <sup>4</sup>	
	20	63 <sup>5</sup>	64 <sup>1</sup>	63 <sup>8</sup>	64 <sup>3</sup>	65 <sup>5</sup>	66 <sup>0</sup>	66 <sup>5</sup>	66 <sup>9</sup>	67 <sup>4</sup>	68 <sup>0</sup>	68 <sup>3</sup>	
	21	64 <sup>7</sup>	65 <sup>0</sup>	65 <sup>8</sup>	66 <sup>5</sup>	66 <sup>7</sup>	66 <sup>8</sup>	66 <sup>9</sup>	67 <sup>3</sup>	67 <sup>5</sup>	68 <sup>1</sup>	69 <sup>0</sup>	
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	65 <sup>5</sup>	66 <sup>5</sup>	67 <sup>3</sup>	68 <sup>1</sup>	68 <sup>6</sup>	68 <sup>7</sup>	68 <sup>7</sup>	69 <sup>0</sup>	69 <sup>3</sup>	69 <sup>5</sup>	69 <sup>7</sup>	
	24	65 <sup>5</sup>	66 <sup>0</sup>	66 <sup>0</sup>	66 <sup>5</sup>	67 <sup>2</sup>	68 <sup>5</sup>	68 <sup>5</sup>	68 <sup>7</sup>	69 <sup>0</sup>	69 <sup>8</sup>	70 <sup>1</sup>	
	25	66 <sup>0</sup>	65 <sup>8</sup>	66 <sup>4</sup>	67 <sup>5</sup>	69 <sup>0</sup>	69 <sup>5</sup>	70 <sup>0</sup>	70 <sup>5</sup>	71 <sup>7</sup>	72 <sup>5</sup>	71 <sup>6</sup>	
	26	66 <sup>6</sup>	66 <sup>6</sup>	66 <sup>8</sup>	67 <sup>3</sup>	68 <sup>3</sup>	68 <sup>5</sup>	69 <sup>3</sup>	69 <sup>6</sup>	70 <sup>4</sup>	71 <sup>5</sup>	72 <sup>0</sup>	
	27	69 <sup>3</sup>	68 <sup>8</sup>	68 <sup>8</sup>	68 <sup>6</sup>	68 <sup>6</sup>	68 <sup>6</sup>	68 <sup>5</sup>	68 <sup>3</sup>	68 <sup>5</sup>	68 <sup>7</sup>	69 <sup>4</sup>	
	28	67 <sup>3</sup>	67 <sup>2</sup>	67 <sup>5</sup>	67 <sup>0</sup>	69 <sup>0</sup>	69 <sup>0</sup>	69 <sup>3</sup>	69 <sup>0</sup>	69 <sup>3</sup>	69 <sup>5</sup>	70 <sup>2</sup>	
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30 <sup>a</sup>	67 <sup>0</sup>	67 <sup>0</sup>	68 <sup>0</sup>	69 <sup>0</sup>	69 <sup>8</sup>	70 <sup>3</sup>	70 <sup>5</sup>	70 <sup>7</sup>	70 <sup>8</sup>	71 <sup>3</sup>	71 <sup>0</sup>	
	31 <sup>a</sup>	66 <sup>3</sup>	66 <sup>3</sup>	66 <sup>5</sup>	66 <sup>4</sup>	66 <sup>5</sup>	66 <sup>6</sup>	67 <sup>0</sup>	67 <sup>0</sup>	66 <sup>7</sup>	66 <sup>8</sup>	66 <sup>8</sup>	
	Hourly Means	68 <sup>26</sup>	68 <sup>38</sup>	68 <sup>70</sup>	69 <sup>13</sup>	69 <sup>87</sup>	70 <sup>30</sup>	70 <sup>62</sup>	70 <sup>85</sup>	71 <sup>20</sup>	71 <sup>70</sup>	71 <sup>96</sup>	71 <sup>98</sup>

<sup>a</sup> The observations on the 30th and 31st days are omitted from the Means, the readings having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

ature, 1'64.

10h.	11h.
148'6	147'4
149'3	149'6
141'9	140'0
154'7	148'8
137'9	145'4
153'7	151'7
—	—
146'8	146'1
138'5	138'6
142'3	142'4
141'8	144'2
140'0	139'7
138'1	138'7
—	—
134'4	133'3
136'0	138'5
148'9	153'1
155'9	155'4
150'4	150'4
151'7	149'7
—	—
155'4	152'7
153'0	152'3
150'0	150'9
144'8	144'8
149'9	149'5
149'5	149'3
—	—
145'1	147'8
152'0	152'0
—	—
146'40	146'31

VERTICAL FORCE.

One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
149'5	147'9	147'6	146'6	146'7	146'7	147'0	147'6	147'7	150'1	152'8	156'7	150'45
149'0	148'5	148'0	146'5	145'6	144'2	143'2	143'1	146'0	151'9	147'5	145'6	149'11
140'0	139'9	141'8	146'8	142'5	112'0	114'6	137'2	133'7	124'1	143'0	146'0	138'30
148'8	147'2	147'2	146'0	143'2	139'8	147'3	148'2	143'7	139'3	142'6	142'8	147'15
151'1	148'5	144'9	144'3	141'8	132'6	135'9	151'2	151'5	151'5	143'4	144'4	143'91
150'8	146'7	146'7	137'0	137'5	137'5	—	—	—	—	—	—	146'40
—	—	—	—	—	—	142'8	144'3	149'4	145'4	149'5	150'3	145'85
146'1	146'4	143'9	144'0	143'6	135'5	138'7	140'4	143'0	144'8	145'9	147'9	145'99
138'6	137'6	139'7	138'8	138'8	139'4	138'8	139'8	141'1	141'3	141'1	142'3	143'08
142'6	142'0	142'1	142'7	143'0	143'9	142'2	140'4	141'0	146'3	146'3	146'1	143'60
142'1	146'1	140'6	140'3	140'3	140'3	141'1	141'1	142'7	145'2	143'4	145'0	143'60
138'3	138'3	138'3	138'8	139'0	139'0	139'1	140'5	141'5	140'0	141'5	140'1	139'65
135'5	136'2	135'6	136'6	137'6	141'6	—	—	—	—	—	—	137'60
—	—	—	—	—	—	133'1	134'4	135'0	135'8	134'8	137'5	131'30
131'3	131'3	131'1	129'6	130'1	129'9	130'2	128'9	116'3	127'0	131'3	135'5	135'96
136'8	136'1	135'3	135'3	135'7	138'9	137'3	139'6	140'0	140'0	141'2	141'1	149'96
152'1	152'0	152'7	146'0	150'9	155'3	155'0	155'4	155'4	155'1	155'1	159'2	156'10
155'1	153'8	155'2	154'6	155'2	155'2	155'2	156'0	154'6	154'2	150'8	155'7	152'00
150'6	150'6	150'6	150'6	151'1	151'1	151'0	152'8	152'8	153'6	153'5	155'7	148'77
145'7	145'6	145'6	147'8	147'8	122'9	—	—	—	—	—	—	152'35
—	—	—	—	—	—	147'3	140'6	148'5	149'1	150'3	159'4	147'9
150'0	150'0	151'2	152'7	153'1	151'6	152'2	152'0	145'7	144'7	147'6	147'9	148'62
150'7	150'7	150'5	152'2	152'2	151'4	146'3	135'4	134'8	135'3	131'2	142'7	149'73
153'6	152'9	151'8	151'8	151'8	146'1	146'2	141'6	145'2	144'3	145'5	143'7	146'41
144'8	144'2	143'6	142'6	144'8	143'6	143'0	145'6	145'6	146'6	147'4	147'4	145'91
142'8	143'0	143'8	145'2	148'0	146'6	146'7	147'4	145'8	135'0	134'0	133'5	147'46
147'1	147'1	147'1	147'0	147'9	148'5	—	—	—	—	—	—	145'93
—	—	—	—	—	—	148'9	148'9	148'6	147'0	145'0	145'1	149'3
148'3	148'3	141'4	146'0	145'8	145'8	145'8	145'4	146'1	146'1	149'3	149'3	151'14
151'4	151'7	149'4	149'1	149'3	149'5	149'5	152'0	154'2	154'2	155'8	156'2	145'44
145'54	145'11	141'79	144'32	144'51	141'40	142'63	143'85	143'73	143'65	144'36	146'32	145'44

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

69'9	70'0	69'7	70'1	70'1	70'0	68'4	67'9	67'9	66'8	66'5	66'0	68'10
70'2	70'5	70'5	70'5	70'5	70'4	70'3	70'3	70'0	68'0	67'4	66'5	68'89
72'7	72'5	72'5	72'5	73'2	73'4	72'9	72'7	71'7	71'0	70'5	70'0	71'07
72'5	72'4	72'4	72'3	71'5	71'0	70'7	69'8	69'5	69'3	69'0	68'6	71'06
72'8	72'5	72'7	72'2	72'0	71'7	71'5	71'0	70'4	70'2	70'3	70'3	71'99
71'8	71'6	71'5	71'3	71'0	70'8	—	—	—	—	—	—	70'07
—	—	—	—	—	—	67'3	67'3	67'1	67'3	67'3	67'7	70'64
72'2	72'4	72'5	72'3	72'3	72'0	72'5	72'3	72'0	72'0	71'5	71'5	73'09
74'5	74'5	74'2	74'5	74'1	74'0	73'6	73'5	73'3	73'0	72'7	72'0	71'55
72'5	72'5	72'5	72'5	72'0	71'7	71'2	70'7	70'4	69'9	69'5	69'4	72'08
73'8	73'7	73'3	73'3	72'8	72'5	72'4	72'2	72'0	72'0	71'6	71'6	73'75
74'7	74'5	74'4	74'2	74'2	74'0	73'8	73'3	73'3	73'3	73'0	73'0	75'29
76'3	76'5	75'7	75'7	75'7	75'6	—	—	—	—	—	—	77'22
—	—	—	—	—	—	77'3	76'5	76'1	75'7	76'0	75'5	74'49
78'6	79'5	79'0	79'2	78'3	77'6	77'1	76'7	76'3	76'0	75'3	74'7	71'0
75'5	75'4	75'3	75'5	75'2	74'4	73'5	72'8	72'3	71'7	71'3	71'0	67'72
69'7	69'6	69'6	68'8	68'5	68'5	64'9	64'8	64'5	64'5	64'3	63'7	64'76
65'4	65'7	65'7	65'5	65'5	65'4	65'0	64'9	64'5	64'5	64'3	63'7	66'45
68'3	68'5	68'5	68'5	67'5	67'3	66'8	66'8	66'5	66'2	65'3	64'7	—
69'0	70'0	69'7	69'5	69'5	69'5	—	—	—	—	—	—	67'74
—	—	—	—	—	—	68'5	67'7	67'4	66'7	66'3	65'7	68'42
69'7	70'0	70'0	69'8	69'5	69'1	68'5	67'7	67'5	66'8	66'2	65'8	66'5
70'1	70'5	70'0	69'0	68'6	68'5	68'1	67'9	67'5	67'2	66'5	66'5	69'54
71'6	71'6	70'8	70'6	69'8	69'8	69'2	69'5	69'0	69'0	68'8	67'4	70'05
72'0	71'6	71'4	71'3	71'3	71'0	71'0	71'4	71'0	70'6	70'4	70'3	69'68
69'4	69'5	70'1	70'8	70'7	70'5	70'0	—	—	—	—	—	68'83
70'2	70'3	70'1	69'6	69'4	69'0	—	—	—	—	—	—	69'35
—	—	—	—	—	—	68'4	68'3	68'3	68'3	67'7	67'4	65'80
71'0	71'5	71'0	69'6	69'5	69'0	68'6	68'4	68'2	67'5	67'0	67'0	—
66'8	66'7	66'0	66'0	65'8	65'6	65'4	64'3	63'8	63'5	63'1	63'0	—
71'96	71'98	71'73	71'48	71'27	70'97	70'51	70'18	69'88	69'54	69'22	68'88	70'44

the induced magnetism

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1 <sup>st</sup> decrease of Temperature, 1° 64.													
Mean (Göttingen Time.)	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
SEPTEMBER.	1 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	151'3	152'7	151'8	151'8	149'6	148'2	145'8	141'9	146'7	146'4	146'3	
	4	153'8	151'7	152'5	153'8	154'2	154'9	157'8	157'7	157'8	157'8	160'9	159'1
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	160'1	161'4	157'5	156'4	155'3	155'9 <sup>b</sup>	154'9	154'0	154'5	155'0	154'3	153'9
	7	158'4	157'0	156'4	157'8	152'7	152'6	150'0	148'7	151'0	152'3	151'3	150'2
	8	153'1	152'3	151'9	151'4	149'5	147'4	144'9	144'9	144'8	144'8	143'5	143'6
	9	152'8	151'4	151'4	151'4	151'9	151'9	155'3	155'3	152'9	152'9	163'8	164'7
	10	163'9	164'1	158'9	158'7	156'9	154'9	154'9	154'9	155'9	155'9	155'9	154'0
	11	161'1	164'8	161'5	160'2	158'8	158'1	158'1	159'0	159'0	158'5	162'1	155'6
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	143'8	148'5	131'4	131'7	150'0	153'2	162'7	165'4	169'7	173'8	175'1	173'5
	14	170'8	173'3	172'2	169'6	169'6	169'6	169'6	169'6	170'3	170'3	168'3	168'2
	15	174'6	173'4	171'5	170'0	167'8	167'8	168'7	169'6	169'6	166'8	165'7	164'4
	16	170'9	170'5	167'9	165'4	163'9	163'5	166'5	162'8	164'1	163'4	163'4	163'4
	17	163'8	163'8	164'4	163'1	160'3	162'7	163'8	163'6	162'0	161'3	160'4	159'0
	18	161'9	161'9	161'2	159'3	159'5	159'5	158'5	159'6	161'2	159'7	159'8	162'2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	162'1	163'3	163'3	162'5	162'0	162'0	161'6	160'7	162'8	161'9	165'4	166'0
	21	164'5	163'8	162'5	161'3	161'1	161'1	159'4	159'4	159'3	159'5	159'2	158'7
	22	166'1	164'9	162'2	160'6	161'6	159'4	159'4	162'8	167'2	166'9	163'1	162'0
	23	155'3	158'9	160'3	155'6	156'1	156'4	157'6	160'6	161'7	157'0	154'8	157'1
	24 <sup>a</sup>	143'6	— <sup>f</sup>	138'8	154'0	150'5	172'5	197'6	195'7	184'1	191'7	190'4	182'7
	25	175'0	175'0	174'5	173'5	172'6	172'5	171'1	171'9	171'4	171'4	169'7	170'7
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27 <sup>c</sup>	— <sup>f</sup>	121'3	158'3	154'5	161'7	160'2	161'3	169'7	169'7	169'7	162'3	159'5
	28	165'3	166'3	167'6	162'6	162'4	163'1	165'1	168'5	169'6	170'6	176'9	177'6
	29	173'3	175'7	174'6	173'5	171'5	171'3	175'9	193'2	198'7	200'5	199'5	191'1
	30	178'2	180'3	178'9	178'3	177'9	176'2	176'2	174'9	173'1	175'6	173'5	171'9
Hourly Means	162'73	163'41	161'56	160'39	160'24	160'10	160'81	161'95	162'88	163'46	163'27	162'64	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
SEPTEMBER.	1 <sup>a</sup>	62'5	62'3	62'5	62'5	63'3	63'5	63'7	63'9	64'5	65'3	66'3	65'7
	2 <sup>a</sup>	63'3	63'4	64'3	65'0	65'6	66'2	66'5	67'0	67'7	68'4	68'8	69'3
	3	66'1	66'5	66'4	66'3	67'0	68'0	68'4	68'7	69'2	69'9	70'2	70'4
	4	65'5	65'0	64'9	64'7	64'7	64'9	64'9	65'0	64'6	64'6	64'5	64'6
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	62'7	62'5	63'5	63'8	64'4	64'5	64'5	64'7	65'3	65'7	66'1	66'3
	7	63'5	64'0	64'5	64'7	66'6	67'3	67'2	67'2	67'3	67'5	67'6	67'5
	8	66'0	66'2	66'7	66'7	67'6	68'7	69'5	70'0	70'2	70'5	70'7	70'5
	9	65'7	65'3	64'9	64'7	64'9	65'0	64'7	65'0	65'2	65'4	65'5	65'5
	10	60'5	61'0	61'7	62'6	63'0	63'3	63'5	64'0	64'3	64'5	64'7	65'1
	11	60'7	61'0	61'5	61'7	62'5	63'3	63'3	63'7	63'8	64'5	64'5	64'5
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	62'7	62'4	62'3	62'1	62'3	62'3	62'3	62'0	61'7	61'5	61'8	60'6
	14	56'5	56'3	56'3	56'3	56'5	56'5	56'6	57'1	57'7	58'0	58'2	58'5
	15	55'1	56'0	57'1	57'2	58'0	58'3	58'5	58'8	59'0	59'5	60'0	60'5
	16	57'4	57'8	58'2	58'5	59'0	59'8	60'2	60'5	60'7	61'5	61'7	62'4
	17	59'9	59'5	60'2	60'5	61'5	62'1	62'4	62'9	63'3	63'6	63'9	63'6
	18	62'5	62'4	62'5	62'5	62'7	62'9	63'3	63'5	63'5	63'5	63'6	63'5
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	60'8	60'7	60'7	60'7	60'7	60'9	61'0	61'4	61'5	61'5	61'6	61'5
	21	60'0	60'0	60'8	61'3	61'5	61'4	61'9	62'5	62'5	63'0	63'5	63'5
	22	58'8	59'2	59'0	60'0	61'0	61'0	61'1	61'4	61'5	62'1	62'6	63'1
	23	62'5	61'3	61'7	62'5	62'6	63'0	63'4	63'7	64'5	65'5	65'8	65'8
	24 <sup>a</sup>	66'0	— <sup>f</sup>	63'5	63'1	63'0	63'1	63'1	63'3	63'1	63'0	62'9	62'8
	25	60'0	59'6	59'2	59'0	59'5	59'6	60'0	60'2	60'1	60'0	60'5	60'5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27 <sup>c</sup>	— <sup>f</sup>	63'7	64'7	62'5	62'5	63'2	63'5	64'2	64'5	65'5	66'4	66'5
	28	61'5	61'7	61'5	62'7	62'7	62'5	62'5	62'2	62'3	62'5	62'4	61'5
	29	57'0	57'4	57'2	57'2	57'7	58'0	58'2	58'4	58'5	58'5	59'0	58'5
	30	56'0	56'0	57'1	57'6	58'0	58'4	58'6	59'0	59'1	59'1	59'0	58'5
Hourly Means	60'97	60'99	61'27	61'51	62'02	62'35	62'55	62'81	62'99	63'29	63'52	63'47	

<sup>a</sup> The observations on the 1st and 2nd days are omitted from the Means, the readings having been affected to an uncertain amount (up to 4<sup>th</sup> on the 2nd) by the induced magnetism of the vertical iron shafts of Hobinson's anemometer. <sup>b</sup> Eight minutes late.

ture, 1° 64.

10 <sup>h</sup> .	11 <sup>h</sup> .
146°3	147°2
146°3	150°2
160°9	159°1
154°3	153°9
151°3	150°2
143°5	143°6
164°7	165°0
154°0	154°6
162°1	153°6
173°1	173°5
169°3	168°2
165°7	164°4
163°4	163°4
160°4	159°0
159°8	162°2
165°4	166°0
159°2	158°7
163°1	162°0
151°8	157°1
190°4	182°7
169°7	170°7
162°3	159°5
176°9	177°6
199°5	191°1
173°5	171°9
163°27	162°64

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
147°2	147°3	147°3	147°3	147°3	147°9	147°9	147°9	148°9	148°9	150°3	151°4	148°47
151°1	151°1	146°1	147°2	147°7	149°4	149°4	150°0	151°0	152°6	149°8	150°1	149°22
157°1	157°8	153°9	156°0	158°6	156°7	—	—	—	—	—	—	156°35
153°8	152°0	151°1	151°6	151°6	151°0	155°6	156°1	156°1	156°9	157°8	157°8	154°78
150°4	148°4	148°4	152°1	151°7	152°4	151°5	149°1	149°5	149°5	150°8	152°1	151°85
143°0	143°9	141°6	143°7	143°7	143°0	145°0	146°5	148°0	149°7	149°7	149°0	147°17
163°1	162°2	160°8	162°8	159°8	158°5	158°6	159°9	159°7	160°8	160°3	160°3	158°36
154°6	154°6	155°1	155°3	156°8	156°8	156°6	156°6	156°8	155°5	156°6	156°6	157°02
153°6	156°0	150°0	156°5	156°7	156°7	—	—	—	—	—	—	155°08
173°3	169°8	169°9	169°5	170°0	170°1	155°0	153°5	150°8	148°5	125°4	131°4	162°55
168°2	168°2	169°8	168°3	169°2	169°6	165°1	162°4	164°6	168°5	168°5	170°8	170°12
163°4	162°7	164°5	161°9	165°5	165°8	169°6	170°5	171°2	172°0	172°0	172°8	167°49
164°4	162°5	163°8	166°3	152°6	154°9	164°8	166°8	166°8	168°7	167°8	168°2	163°28
159°7	157°5	156°5	158°3	158°8	159°2	162°0	162°3	162°3	162°3	158°8	160°7	160°50
162°5	162°5	159°3	161°3	159°3	158°3	—	—	—	—	—	—	160°66
167°9	167°1	165°9	162°3	161°4	159°6	162°3	162°6	162°6	160°6	158°9	161°3	163°02
158°7	158°3	159°2	159°2	159°2	160°9	160°1	160°6	161°3	161°3	163°6	164°9	160°80
160°2	156°2	157°8	158°1	157°7	154°6	161°8	161°8	163°0	163°0	163°0	163°7	160°26
157°7	166°2	158°4	159°1	158°1	158°1	157°8	154°9	158°8	158°2	158°9	157°8	151°41
150°8	186°5	182°3	174°1	174°1	171°9	153°8	139°3	122°7	132°3	129°3	107°5	173°17
168°5	168°5	167°8	166°6	168°0	169°0	162°2	160°5	164°2	171°0	171°7	171°9	162°50
159°5	159°2	160°8	160°7	163°9	163°8	156°4	134°4	128°3	155°0	141°4	106°9	160°02
177°6	177°3	186°8	174°9	170°4	172°0	163°0	163°0	162°9	161°5	161°5	161°8	170°13
181°8	202°0	173°1	180°4	177°1	177°4	167°2	166°7	167°0	170°6	166°4	170°6	180°70
171°9	171°9	172°2	171°5	172°0	172°3	170°5	170°3	170°3	175°6	175°6	176°7	174°20
171°9	171°9	172°2	171°5	172°0	172°3	170°5	170°3	170°3	175°6	175°6	176°7	174°20
162°02	162°58	161°23	161°18	160°28	160°33	159°64	157°82	157°10	159°51	157°37	156°53	160°79

66°3	65°7
68°8	69°3
70°2	70°4
64°5	64°6
66°1	66°3
67°6	67°5
70°7	70°5
65°5	65°5
64°7	65°1
64°5	64°5
61°8	60°6
58°2	58°5
60°0	60°5
61°7	62°4
63°9	63°6
63°6	63°5
61°6	61°5
63°5	63°5
62°6	63°1
65°8	65°8
62°9	62°8
60°5	60°5
66°4	66°5
62°4	61°5
59°0	58°5
59°0	58°5
63°52	63°47

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

65°5	67°0	66°3	65°8	65°6	65°5	65°3	65°0	65°0	61°5	64°2	63°5	64°55
69°5	69°2	69°0	69°3	69°2	68°8	68°5	68°3	68°0	67°6	67°6	66°6	67°37
69°7	69°5	69°5	68°7	68°5	68°2	67°7	66°8	66°6	66°3	65°8	65°3	67°90
64°4	64°3	64°6	64°5	64°4	64°3	—	—	—	—	—	—	64°42
66°4	66°3	66°4	66°2	66°0	65°5	64°3	64°1	63°6	63°4	63°2	63°1	64°95
67°4	67°0	66°9	66°9	66°7	66°5	65°2	64°8	64°8	64°5	64°5	64°2	66°48
70°5	71°0	70°5	70°9	70°7	70°0	66°6	66°5	66°5	66°5	66°7	66°5	68°90
65°5	65°4	65°0	64°7	64°5	64°3	69°0	68°5	68°0	67°8	67°2	66°3	64°40
65°0	64°6	64°8	64°0	63°6	63°5	63°7	63°1	62°6	62°0	61°6	61°3	63°11
64°5	64°5	64°0	63°8	63°6	63°3	62°8	62°5	62°0	61°5	61°1	61°1	63°27
60°1	60°0	59°6	59°0	58°8	58°5	—	—	—	—	—	—	60°30
58°8	58°6	58°5	58°2	58°0	57°6	63°2	63°5	63°2	63°0	63°5	63°5	57°18
61°0	61°3	60°8	60°4	60°0	59°8	57°2	56°8	56°5	56°3	56°0	55°3	58°93
62°5	62°3	62°0	61°5	61°0	60°7	59°2	58°5	58°0	57°7	57°2	56°9	60°36
63°5	63°0	63°3	63°3	63°0	62°5	60°3	60°3	60°1	60°1	60°0	60°0	62°38
63°3	63°9	63°7	63°7	63°6	63°6	62°5	62°3	62°5	62°5	62°6	62°7	62°66
61°5	61°5	61°3	61°8	61°5	61°2	—	—	—	—	—	—	60°98
63°6	63°6	63°2	62°5	62°4	62°2	61°5	61°0	61°0	60°3	60°2	60°1	61°69
64°0	64°5	64°5	63°7	63°4	62°7	60°7	60°4	60°4	60°4	59°5	59°1	62°00
65°7	65°6	65°5	65°3	65°5	65°4	62°5	62°5	62°7	62°4	62°0	62°3	64°26
62°8	62°5	62°8	62°8	62°1	62°0	64°6	64°5	64°6	64°4	64°4	64°5	62°63
60°5	61°0	61°0	61°0	61°0	60°7	61°8	61°6	61°5	61°3	61°3	61°2	60°37
66°5	66°5	66°4	65°7	65°5	65°0	—	—	—	—	—	—	64°47
61°3	60°9	60°7	60°5	59°7	59°4	60°9	60°5	60°5	60°8	61°5	61°3	60°65
59°2	59°5	59°5	59°8	59°8	58°2	64°7	63°9	63°6	63°0	62°6	62°1	58°12
58°2	58°6	59°0	59°0	58°5	58°6	59°2	58°1	57°5	57°4	57°2	56°7	58°33
58°2	58°6	59°0	59°0	58°5	58°6	58°2	58°4	58°8	58°7	59°0	58°5	62°35
63°48	63°50	63°38	63°15	62°92	62°58	62°17	61°81	61°67	61°50	61°32	61°10	62°35

p to 4<sup>h</sup> on the 2nd) by late late.

\* Fifteen minutes late.      \* Three minutes late.      \* Omitted in the Means, on account of disturbance.      \* Off scale.

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Göttingen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	174'1	173'7	174'7	170'5	169'4	169'7	168'6	168'6	169'5	169'5	172'6	174'4
2	175'5	175'5	174'9	172'9	171'3	169'7	169'6	169'6	166'6	164'1	164'5	165'0
3	—	—	—	—	—	—	—	—	—	—	—	—
4	174'1	173'4	171'4	166'1	167'5	166'8	167'5	165'7	164'5	163'1	162'5	163'4
5	164'0	165'3	165'2	165'3	165'0	163'1	161'6	161'5	161'5	161'5	161'7	159'6
6	163'0	163'0	163'0	164'8	164'6	163'3	164'6	166'0	165'7	164'2	163'9	163'9
7	163'1	162'0	164'0	164'0	163'8	161'9	162'5	162'5	163'2	163'2	163'2	163'3
8	161'2	161'2	161'2	158'6	157'9	157'1	158'4	158'4	162'8	166'9	165'3	167'4
9	167'3	167'3	167'1	165'9	163'7	161'8	161'8	163'7	163'7	164'2	163'3	163'3
10	—	—	—	—	—	—	—	—	—	—	—	—
11	173'3	173'3	172'3	172'3	170'7	170'7	170'7	169'8	172'2	171'8	170'9	170'1
12	173'2	173'2	173'2	173'2	170'9	170'0	170'0	173'0	174'9	176'7	173'7	173'8
13 <sup>a</sup>	46'3	163'5	153'8	145'8	167'4	173'3	180'0	185'7	192'9	187'4	183'7	176'4
14	181'2	180'6	179'7	172'0	179'0	178'3	179'4	179'5	181'7	181'7	179'8	178'7
15	178'9	176'1	176'1	177'1	180'8	180'8	184'7	187'5	187'5	184'5	184'6	181'0
16	176'2	175'0	175'0	173'3	172'7	172'7	172'4	175'5	175'4	173'1	170'8	170'5
17	—	—	—	—	—	—	—	—	—	—	—	—
18	161'4	165'5	165'5	164'3	162'9	164'3	165'4	167'1	166'5	166'9	165'6	166'9
19	163'6	165'4	167'2	162'5	163'7	163'0	164'4	168'1	164'7	165'5	166'4	166'5
20	172'6	175'0	171'8	169'4	169'4	169'4	169'4	171'8	171'8	168'7	168'7	168'8
21	169'9	170'8	174'1	174'4	173'2	171'2	170'8	172'4	172'5	172'6	172'5	172'2
22 <sup>a</sup>	174'1	174'2	176'4	176'3	176'6	176'6	176'6	177'6	179'0	182'2	184'4	182'7
23 <sup>a</sup>	137'3	— <sup>b</sup>	213'5	152'0	184'9	188'5	219'8	209'3	199'0	181'9	174'2	204'2
24	—	—	—	—	—	—	—	—	—	—	—	—
25 <sup>a</sup>	180'4	180'7	161'3	188'8	200'6	189'5	186'9	191'9	203'5	196'5	190'3	187'9
26	187'1	189'0	183'0	185'6	185'7	188'4	187'9	188'2	188'9	188'8	188'0	188'9
27	194'7	197'2	195'7	193'9	195'2	194'4	195'3	193'3	193'3	190'6	190'6	191'7
28	193'4	194'2	197'1	192'3	189'4	187'4	187'4	187'7	188'1	184'5	183'9	183'9
29	183'1	183'1	183'1	182'8	177'6	175'4	181'3	180'4	181'2	180'0	178'5	179'6
30	181'4	181'9	182'2	179'8	177'3	173'4	173'4	173'4	173'4	174'4	174'4	174'4
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	174'20	174'62	174'43	172'77	172'35	171'49	172'14	172'90	173'16	172'57	172'02	172'15

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
	0	1	2	3	4	5	6	7	8	9	10	11
1	58'0	58'8	59'7	59'4	59'0	59'0	59'0	59'1	59'0	59'0	59'0	59'0
2	55'2	55'2	55'0	56'8	57'6	58'0	58'2	58'5	59'2	60'0	60'5	60'5
3	—	—	—	—	—	—	—	—	—	—	—	—
4	55'3	56'0	56'4	58'8	58'2	59'0	59'3	60'0	60'4	60'6	61'0	61'2
5	59'8	59'7	59'7	60'0	60'0	60'5	61'4	61'5	62'3	62'9	63'5	63'5
6	61'5	61'3	61'2	61'0	60'7	60'7	60'9	61'0	60'9	61'2	61'2	61'1
7	61'5	61'5	61'3	60'8	60'7	60'8	61'0	60'8	60'8	60'9	61'0	61'0
8	61'5	61'4	61'5	61'3	61'5	61'7	62'1	62'3	62'3	62'3	62'4	62'5
9	59'8	60'0	60'2	60'2	60'4	60'4	60'4	60'5	60'5	60'5	60'7	60'7
10	—	—	—	—	—	—	—	—	—	—	—	—
11	55'2	55'5	56'0	56'8	57'0	56'7	56'6	56'7	56'5	56'5	56'6	56'7
12	55'4	55'0	55'0	55'0	55'2	55'4	55'6	55'2	55'0	55'1	55'2	54'7
13 <sup>a</sup>	53'8	54'0	55'0	56'5	54'6	54'3	54'4	54'3	54'4	54'7	54'5	55'0
14	51'5	51'3	51'3	53'7	52'7	52'6	53'0	53'3	53'3	53'3	53'3	53'3
15	48'2	48'2	50'0	49'5	49'8	50'5	50'9	50'9	51'2	51'5	51'6	51'8
16	51'3	51'5	52'0	53'4	53'7	54'2	54'4	55'0	55'4	56'3	57'0	57'3
17	—	—	—	—	—	—	—	—	—	—	—	—
18	56'7	56'2	56'5	57'2	57'8	58'6	59'0	59'0	59'5	60'5	61'0	61'2
19	60'0	59'4	59'6	59'6	59'5	59'8	59'8	60'0	60'2	60'3	60'5	60'4
20	55'3	55'0	59'0	56'7	56'3	56'8	57'0	57'0	57'4	58'0	58'7	58'8
21	57'2	56'5	55'2	55'2	55'4	55'5	55'4	55'2	55'5	56'0	55'5	55'4
22 <sup>a</sup>	52'7	52'7	52'4	52'2	52'2	52'2	52'2	52'2	52'5	53'0	53'2	53'0
23 <sup>a</sup>	54'2	— <sup>b</sup>	54'0	53'7	54'7	54'9	55'2	55'4	56'4	57'2	58'1	58'2
24	—	—	—	—	—	—	—	—	—	—	—	—
25 <sup>a</sup>	57'2	56'2	56'0	56'2	56'5	56'6	56'7	56'6	56'0	56'2	55'8	55'2
26	50'1	50'0	53'1	50'8	50'6	50'2	50'2	50'5	49'2	50'1	50'2	49'6
27	44'8	44'2	41'8	45'0	45'4	46'1	46'1	46'5	47'2	48'0	48'0	48'4
28	46'4	46'6	47'6	47'4	48'0	48'4	48'9	49'0	49'5	50'5	50'7	50'4
29	49'0	49'2	49'2	49'5	51'0	51'4	52'0	52'1	52'2	53'2	54'1	53'3
30	52'0	51'5	51'5	52'0	52'5	53'5	54'2	54'9	55'2	55'3	55'9	55'5
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	54'80	54'73	55'26	55'46	55'59	55'90	56'15	56'33	56'49	56'91	57'16	57'10

<sup>a</sup> Omitted in the Means, on account of disturbance.<sup>b</sup> Off Scale.



VERTICAL FORCE.  
One Scale Division = .00066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'.64.

10°. 11°.		12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
No. Div. 172'6 164'5	No. Div. 174'4 165'0	No. Div. 174'4 166'0	No. Div. 170'1 160'0	No. Div. 170'1 160'7	No. Div. 170'8 168'7	No. Div. 171'2 168'7	No. Div. 172'3 168'9	No. Div. 172'3 168'8	No. Div. 172'3 168'8	No. Div. 172'3 169'9	No. Div. 172'9 172'9	No. Div. 172'9 172'9	No. Div. 172'9 172'9	No. Div. 171'41
162'5 161'7 163'9 163'2 163'3 163'3	163'4 159'6 163'9 163'2 167'4 163'3	163'4 162'5 163'9 164'1 176'3 165'7	163'5 162'2 163'9 163'2 173'4 165'6	163'5 162'2 163'7 162'5 164'3 165'6	163'5 162'2 163'7 161'6 164'0 165'6	163'5 162'2 163'3 162'2 164'5 163'3	163'5 162'2 163'3 162'2 164'5 163'3	163'5 162'2 163'3 162'2 140'6 163'3	163'5 162'2 163'3 162'2 155'7 163'3	163'5 162'2 163'3 162'2 155'7 163'3	163'5 162'2 163'3 162'2 155'7 163'3	163'5 162'2 163'3 162'2 155'7 163'3	163'5 162'2 163'3 162'2 155'7 163'3	163'5 162'2 163'3 162'2 155'7 163'3
170'9 173'7 183'7 179'8 183'6 170'8	170'1 173'8 176'4 178'7 181'0 170'5	170'1 173'8 178'7 181'8 182'3 172'4	170'1 173'8 184'4 182'1 182'4 174'3	170'8 173'4 180'5 182'7 181'9 174'5	170'8 173'4 180'5 182'7 181'0 174'5	171'2 173'6 178'2 182'7 180'7 174'7	172'3 173'6 178'2 182'7 180'7 174'7	172'3 173'6 178'2 182'7 180'7 174'7	172'3 173'6 178'2 182'7 180'7 174'7	172'3 173'6 178'2 182'7 180'7 174'7	172'9 172'9 172'9 172'9 172'9 172'9	172'9 172'9 172'9 172'9 172'9 172'9	172'9 172'9 172'9 172'9 172'9 172'9	171'41 169'76 165'45 162'62 163'80 162'32 162'17 165'96 169'8 171'49 169'74 175'59 180'25 181'21 169'99 163'82 166'87 168'42 173'07 171'08 180'17 186'63 187'3 189'52 191'49 185'37 180'88 176'49
172'02	172'15	172'64	172'86	172'85	172'84	172'97	172'82	170'82	171'47	171'77	171'40	170'87	170'93	172'46

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

59'0 60'5	59'0 60'5	58'7 60'0	58'8 59'8	58'4 59'6	58'2 59'4	58'0 59'4	57'4 59'4	57'1 59'4	56'8 59'4	56'4 59'4	55'6 59'4	58'11	
61'0 63'5 61'2 61'0 62'4 60'7	61'2 63'5 61'1 61'0 62'5 60'7	60'5 62'8 61'1 61'1 63'0 60'6	60'5 62'5 61'0 61'1 62'3 60'5	60'4 62'3 61'0 61'5 61'5 60'5	60'3 62'3 61'5 61'4 61'2 60'5	60'3 62'1 61'5 61'4 61'3 60'5	60'1 62'1 61'5 61'4 61'3 60'5	60'0 62'0 61'5 61'4 62'3 60'5	56'4 59'4 56'0 55'4 54'4 52'8 49'5 51'2	56'2 59'4 56'0 55'4 54'4 52'8 48'7 51'1	56'0 59'4 56'0 55'4 54'4 52'8 48'7 51'1	55'6 59'4 56'0 55'4 54'4 52'8 48'7 51'1	58'11 59'58 61'79 61'17 61'17 61'76 59'34 56'32 55'1 54'88 54'14 51'71 50'92 55'62 59'80 59'13 58'00 54'68 52'47 56'35 54'46 48'84 46'85 49'11 52'20 54'12
57'16	57'10	56'80	56'65	56'49	56'38	56'00	55'88	55'68	55'43	55'26	55'05	56'07	

VERTICAL FORCE.													
One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°.64.													
Mean Göttingen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
NOVEMBER.	1	Sc. Div. 173.9	Sc. Div. 173.9	Sc. Div. 172.6	Sc. Div. 166.7	Sc. Div. 164.8	Sc. Div. 167.0	Sc. Div. 169.8	Sc. Div. 169.8	Sc. Div. 171.8	Sc. Div. 171.8	Sc. Div. 172.7	Sc. Div. 181.3
	2	171.7	175.0	175.0	173.3	171.0	171.2	170.8	169.8	166.9	166.5	165.1	165.3
	3	164.4	164.9	161.5	162.6	162.0	165.7	166.8	166.8	170.6	169.3	167.9	167.9
	4	166.6	170.2	165.0	167.4	167.1	165.5	166.2	167.9	169.6	169.4	166.6	166.3
	5	172.7	173.2	172.2	171.7	171.7	171.7	171.7	172.1	173.6	171.6	172.5	172.7
	6	177.7	180.2	173.7	176.2	176.2	176.2	176.2	175.4	179.2	178.6	176.9	177.8
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	179.9	179.9	178.1	177.4	177.9	176.5	178.1	179.1	179.0	179.1	178.1	178.7
	9	172.6	171.6	171.5	171.5	171.2 <sup>b</sup>	170.3	169.5	170.4	170.4	170.4	168.7	169.3
	10	173.5	175.6	175.5	175.3	177.0	176.4	178.5	178.5	180.6	182.2	183.7	178.5
	11	180.2	180.2	184.0	182.5	182.0	182.8	183.7	183.7	183.7	183.2	183.2	183.1
	12	180.8	184.4	184.4	179.0	179.0	181.1	181.0	182.2	182.2	182.1	181.3	180.9
	13	180.5	180.5	180.3	180.3	180.1	188.7	181.6	180.7	180.7	179.8	182.2	180.8
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	184.8	184.7	185.0	183.1	180.9	180.4	181.7	182.6	182.6	182.9	182.6	181.7
	16	179.8	181.1	181.6	180.9	183.7	182.7	182.7	184.4	185.3	187.7	184.9	184.9
	17	176.5	176.6	176.8	176.6	175.7	174.7	174.5	174.9	174.9	174.9	174.7	174.6
	18	172.8	173.7	173.9	173.9	172.8	171.9	171.9	173.3	173.6	173.6	175.6	174.8
	19	172.7	172.8	178.9	178.9	178.9	180.8	181.5	183.5	184.4	188.3	216.6	191.6
	20 <sup>c</sup>	188.6	168.8	181.1	184.9	186.0	187.3	187.3	188.3	190.5	185.5	188.5	189.8
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22 <sup>c</sup>	188.4	187.0	187.0	187.4	185.5	185.2	185.4	180.0	183.7	180.2	225.4	224.4
	23	185.7	185.4	185.5	183.7	183.4	181.5	181.5	181.6	181.6	178.3	178.3	178.2
	24	175.6	175.6	175.7	175.2	171.4	173.5	176.1	178.1	179.4	179.4	176.9	175.7
	25 <sup>c</sup>	174.1	174.0	174.0	172.4	170.6	172.2	182.1	185.3	189.6	193.3	204.5	201.7
	26	179.2	177.2	184.5	185.7	186.4	187.5	191.0	189.7	189.7	191.9	193.4	192.7
	27	186.5	187.1	188.0	188.7	190.4	193.0	191.5	190.7	193.9	193.8	195.0	19.4
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	205.2	205.3	202.4	205.7	205.2	205.2	205.3	204.0	202.9	201.6	200.5	200.5
	30	203.1	203.1	196.6	198.1	199.3	199.0	199.0	199.6	198.8	197.8	197.8	197.8
Hourly Means	178.97	179.67	179.25	178.89	178.61	179.18	179.59	179.90	180.67	180.62	181.53	180.73	

TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
NOVEMBER.	1	53.6	53.8	54.0	54.1	54.8	55.2	55.7	56.2	56.8	57.2	57.8
	2	57.2	57.2	57.2	57.7	58.7	59.2	59.3	59.6	59.8	60.2	60.6
	3	59.0	59.0	59.0	59.0	59.0	59.2	59.6	59.8	59.8	59.9	59.8
	4	58.4	58.0	58.0	58.8	59.0	59.2	59.3	59.4	60.0	59.8	60.0
	5	56.0	54.4	55.0	54.5	54.5	54.6	55.0	54.7	54.9	55.2	55.6
	6	51.5	52.1	59.2	52.2	52.2	52.4	52.0	52.3	52.4	53.2	53.6
	7	—	—	—	—	—	—	—	—	—	—	—
	8	49.2	49.4	49.4	49.7	50.0	50.5	51.0	51.4	52.1	52.3	53.1
	9	55.5	55.9	56.0	56.0	56.1	56.7	57.2	57.4	58.0	58.5	59.0
	10	53.8	53.1	53.0	53.0	53.0	53.0	53.0	53.0	52.8	52.5	52.4
	11	51.2	50.8	50.6	50.5	50.2	50.4	50.8	51.2	51.2	51.1	51.2
	12	49.8	49.4	49.6	50.6	50.5	50.2	50.7	51.0	51.2	51.2	50.9
	13	49.8	49.9	50.2	50.0	50.1	50.6	50.8	51.2	51.2	51.8	51.7
	14	—	—	—	—	—	—	—	—	—	—	—
	15	47.5	47.6	47.8	48.0	48.4	49.0	49.2	49.3	49.4	49.4	49.4
	16	47.5	47.4	47.4	47.8	48.0	48.2	48.6	49.4	49.6	50.2	50.4
	17	53.0	53.0	52.9	52.7	52.7	53.4	53.8	54.0	54.5	54.4	54.6
	18	54.3	54.2	54.1	53.3	53.6	53.9	54.0	54.0	53.8	54.2	54.2
	19	52.7	52.4	51.2	50.5	49.8	49.2	49.0	48.8	48.6	48.4	49.4
	20 <sup>c</sup>	43.7	43.6	44.0	44.2	44.6	44.9	46.2	46.0	46.4	46.6	47.0
	21	—	—	—	—	—	—	—	—	—	—	—
	22 <sup>c</sup>	46.2	46.4	46.4	46.6	47.0	48.0	49.2	49.7	50.5	51.2	51.7
	23	51.8	51.4	51.0	50.7	51.0	51.3	51.6	52.4	52.7	53.4	54.0
	24	55.5	55.3	55.2	55.2	55.2	55.5	55.6	55.9	56.0	56.2	56.2
	25 <sup>c</sup>	54.2	54.2	54.2	54.4	55.1	55.1	55.0	54.6	54.4	54.8	54.4
	26	56.1	49.3	48.6	48.4	47.8	48.2	48.3	48.2	47.8	47.4	47.4
	27	47.4	47.2	47.0	46.7	46.0	46.4	46.7	46.6	46.8	47.0	47.2
	28	—	—	—	—	—	—	—	—	—	—	—
	29	35.8	35.9	35.9	35.9	35.4	36.1	36.3	36.8	37.5	38.1	38.6
	30	37.1	37.1	38.2	37.6	38.1	38.9	39.1	39.6	40.0	39.8	40.0
Hourly Means	51.20	51.03	51.33	51.00	51.05	51.39	51.60	51.84	52.05	52.24	52.43	

<sup>a</sup> Fifteen minutes late.

<sup>b</sup> Two minutes late.

ure, 1'64.

10 <sup>h</sup> .	11 <sup>h</sup> .
189°5	181°3
189°5	181°3
166°2	166°0
166°1	166°0
167°9	167°9
166°6	166°3
172°5	172°7
176°9	177°8
—	—
178°1	178°7
168°7	169°3
183°7	178°5
183°2	183°1
181°3	180°9
182°2	180°8
—	—
182°6	181°7
184°9	184°9
174°7	174°6
175°6	174°8
216°6	191°6
188°5	189°8
—	—
225°4	224°4
178°3	178°2
176°9	175°7
204°5	201°7
193°4	192°7
195°0	19°4
—	—
200°5	200°5
197°8	197°8
—	—
181°53	180°73

VERTICAL FORCE.

One Scale Division = 000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
189°5	181°4	164°6	164°6	166°3	175°7	177°8	171°4	161°2	169°9	169°9	169°7	174°20
166°2	166°0	166°4	167°4	167°4	165°1	163°5	164°0	164°3	164°3	156°5	156°3	167°05
166°1	166°0	166°0	163°1	163°3	164°5	164°5	149°5	153°1	160°8	162°4	166°6	164°01
166°2	166°2	166°3	166°3	166°9	167°6	167°9	170°3	171°2	171°2	171°2	171°7	167°95
172°9	173°6	173°6	173°2	173°2	173°2	174°4	174°3	174°4	175°8	165°3	174°8	172°76
177°6	177°6	178°2	178°3	178°3	178°8	—	—	—	—	—	—	—
—	—	—	—	—	—	178°9	183°3	178°9	181°2	179°3	179°9	178°11
174°2	174°8	175°9	175°8	175°8	173°9	165°2	170°3 <sup>a</sup>	170°3	171°7	171°5	171°7	175°54
172°3	177°0	177°0	173°6	173°6	173°3	173°6	173°7	173°8	176°0	175°9	171°8	172°58
179°2	181°6	181°6	181°8	179°1	179°1	174°5	172°3	177°7	179°4	179°4	179°8	178°37
183°1	183°1	183°1	182°9	182°5	180°7	182°1	182°1	182°2	182°7	181°8	180°0	182°44
180°2	180°2	180°2	179°4	177°3	176°1	173°6	173°5	177°2	177°2	179°2	179°5	179°53
182°9	181°6	181°2	181°2	181°2	180°9	—	—	—	—	—	—	—
—	—	—	—	—	—	184°4	181°4	177°6	178°1	178°1	180°4	181°18
181°7	182°8	184°2	184°2	184°5	184°7	181°7	182°7	182°3	182°3	182°3	182°8	183°01
185°0	185°0	184°5	183°4	183°3	181°4	180°5	178°8	177°8	176°1	176°1	176°6	182°01
173°0	173°0	175°6	174°7	174°3	172°6	173°0	172°8	172°8	172°8	171°8	171°3	174°30
174°2	175°0	172°6	173°7	173°2	173°2	171°4	172°5	173°6	172°0	175°3	172°8	173°39
189°8	198°4	190°5	193°4	199°2	191°0	191°0	191°0	191°0	191°0	191°0	191°0	188°34
189°8	192°3	191°2	191°2	191°4	191°4	—	—	—	—	—	—	—
—	—	—	—	—	—	188°5	187°8	187°8	188°4	188°4	188°4	187°76
190°8	189°0	181°8	209°7	142°9	135°0	171°5	181°3	181°2	177°4	179°7	179°7	181°28
178°0	179°2	178°9	177°0	176°4	176°4	176°4	176°3	176°1	176°4	175°6	175°6	179°46
176°8	175°1	175°1	179°6	165°9	173°8	181°8	176°2	177°8	182°4	178°6	178°7	176°43
204°8	216°9	223°3	177°8	161°5	178°8	177°7	177°7	176°8	178°6	179°9	179°2	184°57
187°2	196°8	197°6	184°3	186°7	188°1	188°8	188°6	185°8	185°4	185°3	185°8	187°89
196°7	193°1	193°1	192°9	192°9	193°0	—	—	—	—	—	—	—
—	—	—	—	—	—	204°7	204°7	204°7	204°3	206°4	205°8	195°38
201°1	202°1	202°1	202°6	202°2	203°0	203°0	202°2	202°2	202°5	203°1	203°1	203°01
196°0	196°0	196°4	196°4	196°4	197°4	196°4	197°5	195°3	195°2	190°7	194°6	197°43
—	—	—	—	—	—	—	—	—	—	—	—	—
180°43	182°41	181°50	179°56	179°13	179°28	179°66	178°80	178°45	179°51	178°55	179°27	179°76

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

57°7	57°8
60°5	60°6
59°8	59°8
60°0	60°0
55°6	55°3
53°6	53°4
—	—
53°1	53°5
59°0	58°5
52°4	53°0
51°2	51°2
50°9	51°0
51°7	51°8
—	—
49°4	49°2
50°4	50°4
54°6	55°1
54°2	54°4
48°4	49°4
47°0	46°4
—	—
51°7	53°8
54°0	54°2
56°2	56°4
54°8	54°4
47°4	47°8
47°2	46°4
—	—
38°6	38°8
40°0	40°6
—	—
52°43	52°55

58°2	58°2	58°2	58°0	58°5	58°8	58°8	58°0	57°4	57°3	57°2	57°0	56°77
60°2	60°2	60°1	60°0	60°0	60°0	59°8	59°6	59°5	59°2	59°2	59°2	59°34
59°8	59°8	59°8	60°0	60°0	59°9	59°8	59°7	61°0	60°0	59°3	59°0	59°63
60°0	60°0	59°4	59°0	58°9	58°4	58°0	57°3	57°1	56°8	56°5	56°2	58°65
55°1	54°9	54°8	55°0	54°7	54°4	54°2	54°0	53°8	53°6	53°0	52°2	54°56
53°2	53°0	52°6	52°4	52°0	51°7	—	—	—	—	—	—	—
—	—	—	—	—	—	48°4	48°4	48°4	48°4	48°5	49°0	51°77
53°4	53°4	53°7	51°2	51°1	54°0	54°1	54°2	54°1	54°2	54°2	55°0	52°51
58°2	57°5	57°2	57°2	57°0	57°0	56°5	54°9	54°7	51°2	53°8	51°0	56°54
53°0	52°9	52°5	52°1	52°1	52°1	52°1	52°2	52°2	52°0	51°7	51°5	52°58
51°2	51°0	50°9	50°8	50°6	50°6	50°5	50°8	50°7	50°2	50°2	50°2	50°75
51°1	51°0	51°0	50°8	51°4	52°0	52°0	50°7	50°4	50°1	49°6	49°6	50°66
51°4	51°4	51°0	50°3	50°2	49°8	—	—	—	—	—	—	—
—	—	—	—	—	—	47°3	47°2	47°8	47°5	47°5	47°5	49°92
49°2	48°7	48°5	48°2	48°0	48°0	47°8	47°8	47°8	47°7	47°6	47°5	48°37
50°4	50°8	51°2	51°4	51°5	52°0	52°5	52°3	52°5	52°6	52°8	52°9	50°32
55°6	55°7	55°7	55°5	55°4	55°4	55°3	55°2	55°2	55°2	55°0	51°7	51°50
54°6	54°7	55°6	55°0	54°8	54°8	54°5	54°3	54°1	53°6	53°1	52°7	54°16
50°0	48°4	47°5	47°4	46°6	46°2	45°7	45°4	45°0	44°4	44°2	44°2	48°12
45°8	45°4	45°4	45°4	45°2	45°1	—	—	—	—	—	—	—
—	—	—	—	—	—	45°1	45°0	45°0	44°9	45°1	45°6	45°27
54°8	54°5	54°2	54°0	54°8	55°0	55°0	55°0	51°0	53°6	53°0	52°2	51°53
54°4	54°7	55°0	55°2	55°4	55°4	55°4	55°3	55°2	55°0	55°3	55°5	53°61
57°0	56°5	56°3	56°0	55°9	55°7	55°5	55°2	55°2	51°6	54°2	51°0	55°60
55°0	55°7	55°2	55°1	55°0	54°4	54°2	54°0	53°7	52°8	51°6	50°5	54°28
48°4	47°8	47°9	47°4	47°8	48°2	47°7	47°4	46°7	46°7	46°9	46°8	47°87
46°2	45°4	45°5	45°4	45°4	45°0	—	—	—	—	—	—	—
—	—	—	—	—	—	36°1	36°0	35°4	35°3	35°5	35°6	43°67
38°8	38°4	38°1	38°6	38°6	38°3	38°3	38°3	38°1	37°9	37°7	37°2	37°47
41°1	41°2	41°2	41°2	40°8	40°6	40°6	39°7	39°6	40°6	40°4	40°3	59°72
—	—	—	—	—	—	—	—	—	—	—	—	—
52°68	52°42	52°33	52°22	52°16	52°10	51°34	51°04	50°95	50°74	50°58	50°51	51°61

\* Omitted in the Means, on account of disturbance.

VERTICAL FORCE.												
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean Guttin- gen Time. } DECEMBER.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	195.7	195.7	195.7	196.8	195.2	193.2	193.2	193.2	191.5	189.5	188.2	187.8
2	185.9	184.8	186.7	184.3	184.3	184.3	182.7	185.8	185.8	187.5	194.2	192.0
3	184.5	184.5	186.8	185.8	185.1	185.1	185.1	187.0	188.7	189.7	189.7	189.7
4	189.2	189.2	186.2	189.1	189.1	190.4	190.4	192.5	192.5	192.5	192.5	192.7
5	—	—	—	—	—	—	—	—	—	—	—	—
6	194.6	191.6	194.6	194.6	191.6	191.6	190.6	190.6	190.2	189.4	189.4	187.7
7	190.6	190.6	189.9	189.7	189.4	188.7	188.2	186.0	184.5	183.3	182.4	182.2
8	174.5	179.1	182.2	183.3	183.3	184.7	184.7	183.7	184.4	183.9	182.2	182.2
9	176.6	176.6	178.5	178.5	179.6	180.1	180.4	181.3	183.0	181.9	179.8	179.3
10	171.2	171.0	172.4	173.2	172.8	172.8	171.8	172.1	170.3	176.7	176.7	178.9
11	167.9	169.0	169.2	171.8	170.7	173.6	175.5	176.5	180.3	179.4	179.4	180.2
12	—	—	—	—	—	—	—	—	—	—	—	—
13	182.3	182.3	181.4	181.3	179.9	180.4	181.3	181.2	181.6	181.0	180.9	179.9
14	180.8	181.9	184.1	184.4	183.5	183.5	182.5	182.5	182.5	184.5	183.8	185.8
15	183.1	182.4	182.5	183.5	181.7	180.7	181.8	183.1	183.6	183.8	183.6	183.4
16	191.1	189.7	191.6	192.8	193.1	191.4	191.4	191.4	191.4	191.4	191.9	190.8
17	183.7	181.5	193.0	188.7	190.7	186.5	194.9	207.9	216.2	203.1	206.4	195.6
18 <sup>b</sup>	196.5	194.9	194.5	195.4	197.1	196.2	197.1	197.7	200.1	201.6	197.6	197.6
19	—	—	—	—	—	—	—	—	—	—	—	—
20 <sup>b</sup>	85.0	76.3	160.9	156.4	209.7	231.0	231.5	221.3	246.1	237.8	239.1	233.7
21	214.1	213.5	212.0	211.6	211.8	211.8	212.3	212.2	210.8	209.6	209.6	209.6
22	203.9	201.1	203.0	200.7	201.5	202.7	201.7	203.5	203.0	201.4	201.7	198.5
23	192.9	193.3	194.4	198.6	198.3	198.4	197.5	200.5	202.8	203.4	203.7	200.6
24	197.9	197.9	201.1	200.5	198.4	198.3	198.3	199.1	200.7	199.3	199.3	199.0
25 <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—
27	206.1	206.1	206.0	208.0	204.0	203.0	203.1	204.3	205.6	205.6	205.2	205.0
28	198.1	196.4	196.4	196.7	195.0	194.8	193.7	193.7	195.0	192.7	192.7	192.3
29	185.8	185.8	185.8	183.7	178.0	181.3	181.3	181.3	196.0	185.8	182.8	180.9
30	180.6	180.0	179.6	178.6	176.5	175.4	176.2	177.4	178.0	176.9	176.9	174.5
31	173.8	172.4	173.9	173.7	172.4	172.4	173.2	173.2	174.8	173.5	172.6	172.6
Hourly Means	187.71	187.60	188.62	188.66	187.75	187.71	187.95	189.17	190.55	189.41	189.40	188.42
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
DECEMBER.	1	2	3	4	5	6	7	8	9	10	11	12
1	40.4	40.2	40.1	40.9	41.5	42.2	42.6	42.7	43.2	44.0	44.2	45.0
2	46.8	47.0	46.5	46.4	46.4	46.4	46.8	47.4	47.6	48.2	48.2	48.1
3	47.3	47.2	46.4	46.4	46.4	46.5	46.6	46.5	46.6	46.3	46.2	45.7
4	45.0	44.6	44.3	44.3	43.9	44.3	44.3	44.2	44.1	44.4	44.6	44.4
5	—	—	—	—	—	—	—	—	—	—	—	—
6	41.5	41.7	41.4	41.4	42.2	42.9	44.1	44.4	44.5	44.6	44.6	45.1
7	43.4	43.7	43.5	44.3	44.5	45.0	45.3	46.0	46.4	47.6	48.2	48.4
8	47.0	46.9	46.6	46.7	47.2	47.7	48.0	48.4	48.6	49.2	49.4	49.4
9	51.1	51.4	50.6	50.3	50.2	50.3	50.4	50.4	50.0	50.2	50.4	51.0
10	53.8	54.1	53.6	53.6	53.5	54.2	54.1	54.8	54.7	55.0	55.0	55.0
11	52.0	51.5	51.5	51.7	51.3	51.6	51.8	52.1	51.9	52.0	52.0	52.0
12	—	—	—	—	—	—	—	—	—	—	—	—
13	48.4	48.5	48.4	48.3	48.3	48.5	48.6	48.7	48.7	48.7	49.4	49.2
14	47.6	47.4	46.9	46.6	46.8	47.4	47.6	47.8	48.0	48.0	47.5	47.2
15	47.6	47.4	47.2	47.2	47.4	47.8	48.0	47.7	47.4	47.5	47.6	47.4
16	42.2	42.4	42.3	40.8	40.0	39.8	39.8	40.1	40.3	40.5	41.2	41.0
17	39.8	39.8	39.1	39.0	39.0	39.0	39.3	39.5	40.2	40.2	42.0	43.9
18 <sup>b</sup>	40.2	40.0	39.8	39.6	39.6	39.8	40.3	40.8	41.2	41.7	42.2	42.1
19	—	—	—	—	—	—	—	—	—	—	—	—
20 <sup>b</sup>	42.2	42.2	41.2	40.6	40.0	39.4	39.3	39.8	40.0	39.8	39.7	39.0
21	35.4	36.1	35.9	35.7	36.0	36.3	36.3	36.8	37.0	37.3	37.5	37.3
22	38.8	38.7	38.8	38.5	38.9	39.1	40.0	40.0	40.4	40.9	41.6	42.7
23	42.4	42.6	41.7	40.9	40.4	40.4	40.4	40.0	39.7	40.3	40.3	41.0
24	40.0	39.8	39.8	40.0	40.1	4.2	40.1	40.3	40.3	40.6	41.0	41.4
25 <sup>d</sup>	—	—	—	—	—	—	—	—	—	—	—	—
26	—	—	—	—	—	—	—	—	—	—	—	—
27	33.1	33.5	33.6	33.4	33.4	33.8	34.0	34.1	34.2	34.3	34.0	34.2
28	38.0	38.1	38.3	38.8	39.1	39.3	39.6	40.0	40.4	41.0	41.4	41.5
29	44.5	44.5	44.4	44.9	45.9	46.5	47.2	47.6	47.9	48.4	48.4	48.5
30	49.4	49.4	50.0	50.0	50.1	50.9	50.8	51.0	51.2	51.2	51.3	51.6
31	52.4	52.4	53.0	53.0	52.8	52.7	52.5	52.5	52.5	53.0	53.2	53.2
Hourly Means	44.50	44.54	44.34	44.30	44.39	44.70	44.94	45.12	45.23	45.56	45.80	46.01

\* Two minutes late.

\* Omitted in the Means, on account of disturbance.

Temperature, 1° 64.

10h.	11h.
188°2	187°8
194°2	192°9
189°7	189°7
192°5	192°7
—	—
189°4	187°7
182°4	182°2
182°2	182°2
179°8	179°3
176°7	178°9
179°4	180°2
—	—
180°9	179°9
183°8	185°8
183°6	183°4
191°9	190°8
206°4	195°6
197°6	197°6
—	—
239°1	235°7
206°6	209°6
201°7	198°5
203°7	200°6
199°3	199°0
—	—
205°2	205°0
192°7	192°3
182°8	180°9
176°9	174°5
172°6	172°6
—	—
189°40	188°42

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
187°3	188°8	190°5	187°1	189°1	189°1	189°1	189°4	182°4	189°8	189°2	183°9	190°56
198°8	200°0	196°2	202°6	202°4	195°7	195°7	188°8	168°5	181°6	184°8	185°0	189°14
189°7	191°5	191°6	193°6	193°6	193°8	192°9	190°4	190°4	190°0	189°6	190°1	189°12
192°8	192°4	192°4	193°3	191°8	191°8	—	—	—	—	—	—	192°09
—	—	—	—	—	—	195°4	192°8	194°4	196°7	195°3	194°6	—
186°9	188°1	188°1	187°8	187°8	187°8	185°1	188°7	189°4	189°4	189°2	189°5	189°89
181°5	181°5	183°6	187°0	185°3	185°3	183°5	187°8	187°7	183°7	180°7	179°1	185°51
180°4	180°4	182°3	183°4	183°4	180°8	181°1	175°7	178°6	178°0	177°8	174°8	181°00
179°3	177°0	177°0	178°7	177°6	177°6	176°5	174°7	169°5	170°0	172°1	171°2	177°37
178°9	181°6	181°4	183°8	176°3	175°0	170°6	173°8	176°4	177°7	172°9	168°1	174°97
179°4	180°8	182°1	182°3	182°3	182°3	—	—	—	—	—	—	175°42
—	—	—	—	—	—	183°3	183°3	183°3	183°3	183°1	183°1	—
179°9	181°2	182°0	182°7	182°7	182°7	182°9	182°9	182°9	180°7	180°8	180°8	181°48
184°2	184°5	182°8	182°8	183°1	182°0	182°0	182°6	181°6	182°2	182°9	183°1	183°07
183°4	179°9	179°9	182°5	183°7	181°0	184°0	186°2	186°4	181°6	186°8	189°1	183°49
190°5	191°3	193°7	192°9	192°9	192°9	192°9	192°9	192°9	193°5	187°8	182°9	191°21
197°8	194°8	196°5	198°6	197°1	196°3	192°4	198°2	196°5	197°5	191°1	191°1	195°67
196°7	195°5	195°3	194°5	192°7	190°7	—	—	—	—	—	—	170°39
—	—	—	—	—	—	62°0	100°5	130°8	—	22°0	55°0	—
251°1	264°5	258°2	255°1	225°8	225°5	221°6	220°3	211°2	215°5	214°5	214°5	213°36
209°3	209°6	209°6	210°0	210°0	210°0	208°3	208°7	207°6	206°5	204°4	203°9	209°87
199°4	199°0	198°8	198°5	199°4	198°4	198°0	195°6	192°3	193°4	192°1	192°9	199°31
199°0	200°8	200°8	198°8	198°4	199°5	199°4	197°7	197°7	197°7	196°6	197°2	198°67
199°3	197°5	196°0	196°2	197°6	197°6	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	201°02
205°1	201°9	205°0	205°3	201°7	201°7	201°7	203°5	203°5	201°6	199°4	199°3	201°24
192°2	190°8	189°6	189°6	189°6	188°9	188°1	186°8	186°7	186°7	181°9	181°9	191°51
181°4	182°3	183°6	182°6	182°1	182°3	181°1	178°5	180°6	180°6	180°6	180°6	182°70
174°5	174°6	175°7	175°0	175°0	175°0	175°0	174°7	174°7	174°4	174°4	173°6	176°13
173°9	173°3	173°3	173°3	173°3	173°4	173°4	—	—	—	—	—	173°05
—	—	—	—	—	—	—	—	—	—	—	—	—
188°51	188°61	188°98	189°52	189°13	188°62	188°50	188°18	186°93	187°33	186°27	185°92	188°31

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

41°2	45°0
48°2	48°1
46°2	45°7
41°6	44°4
—	—
41°6	45°1
48°2	48°4
49°4	49°4
50°4	51°0
55°0	55°0
52°0	52°0
—	—
49°4	49°2
47°5	47°2
47°6	47°4
41°2	41°0
42°0	43°9
42°2	42°1
—	—
39°7	39°0
37°5	37°3
41°6	42°7
40°3	41°0
41°0	41°4
—	—
34°0	31°2
41°4	41°5
48°3	48°5
51°3	51°6
53°2	53°2
—	—
45°80	46°01

45°2	45°4	45°5	45°4	45°7	46°4	46°5	46°0	46°5	46°2	46°0	46°6	41°11
47°9	47°7	47°5	48°0	47°8	47°3	47°0	47°2	47°1	47°4	47°2	47°3	47°31
45°4	45°4	45°2	45°2	45°2	45°0	45°0	45°3	45°0	45°0	45°0	41°8	45°81
44°4	43°8	43°8	41°0	43°7	43°6	—	—	—	—	—	—	—
—	—	—	—	—	—	41°0	41°0	40°8	40°6	41°0	41°7	43°41
46°3	45°6	45°6	45°6	45°3	45°4	45°6	41°5	41°2	43°7	43°5	43°4	44°05
48°2	48°3	48°2	47°6	47°3	47°2	46°8	46°4	46°7	47°0	47°0	47°0	46°42
49°8	50°0	49°8	50°0	50°0	50°0	50°2	50°4	50°7	51°0	51°0	51°1	49°09
51°2	51°4	51°5	51°6	51°9	52°0	52°3	53°0	53°7	51°0	51°0	53°8	51°53
55°0	55°1	55°2	51°6	54°3	51°1	54°1	54°0	53°2	53°0	52°7	52°3	51°14
51°7	51°2	50°8	50°2	50°0	49°5	—	—	—	—	—	—	50°42
—	—	—	—	—	—	47°4	47°4	47°4	47°5	47°6	47°9	—
49°2	49°0	48°5	48°2	48°0	47°6	47°5	46°7	46°5	47°4	47°6	47°4	48°22
47°1	47°3	47°4	47°4	47°3	47°6	47°6	47°6	47°4	47°6	47°6	47°6	47°43
47°3	47°2	47°4	47°4	46°5	45°9	45°0	41°0	41°3	41°0	43°4	42°8	46°48
41°4	41°6	41°6	42°2	41°7	41°6	42°0	41°6	40°8	40°3	40°2	40°0	41°06
43°6	43°5	42°8	41°8	41°4	41°3	41°2	40°4	40°4	40°3	40°0	39°8	40°72
42°2	42°3	42°8	42°7	42°8	43°0	—	—	—	—	—	—	—
—	—	—	—	—	—	39°8	40°6	42°3	—	42°6	42°6	41°35
38°1	38°0	38°4	38°0	38°0	37°1	36°6	35°9	35°7	35°0	34°3	34°6	38°45
37°0	36°6	36°4	36°6	36°3	36°1	35°7	36°1	36°9	37°7	38°1	38°4	36°65
43°4	43°3	42°4	42°2	42°2	42°2	42°2	42°2	42°5	42°4	42°7	42°2	41°18
41°6	41°2	41°2	41°0	40°8	40°8	40°5	40°5	40°3	40°3	40°0	39°7	40°75
41°8	41°6	41°4	40°8	40°3	40°0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	38°39
—	—	—	—	—	—	31°1	31°4	31°6	32°0	32°6	33°1	—
34°2	34°0	33°9	31°1	31°1	31°0	34°0	31°3	31°9	36°1	37°1	37°3	34°32
41°7	41°9	42°5	43°3	43°6	44°0	44°3	41°5	41°6	44°6	44°8	44°3	41°65
49°0	49°3	49°3	49°2	49°0	48°7	48°6	48°9	48°8	49°1	49°0	49°1	47°78
52°0	52°3	52°2	52°2	52°2	52°2	52°2	52°2	52°4	52°6	52°7	52°7	51°45
53°2	53°2	52°7	52°8	52°8	52°6	52°6	53°2	53°1	53°0	53°2	54°2	52°91
—	—	—	—	—	—	—	—	—	—	—	—	—
46°15	46°08	45°95	45°89	45°72	45°63	45°01	41°94	41°99	45°10	45°17	45°19	45°22

\* Out of the field.

a Christmas Day.

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Division, corresponding to 1° decrease of Temperature, 1' 64.													
Mean Galtin- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
JANUARY.	1	Sc. Div. 169'8	Sc. Div. 169'8	Sc. Div. 170'9	Sc. Div. 171'1	Sc. Div. 168'8	Sc. Div. 168'8	Sc. Div. 169'7	Sc. Div. 170'4	Sc. Div. 170'4	Sc. Div. 170'4	Sc. Div. 170'4	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	183'5	182'8	174'7	181'1	178'2	179'4	181'9	182'4	182'7	184'5	185'6	184'3
	4	176'7	181'5	182'9	185'3	184'5	181'7	183'0	184'0	186'3	186'0	186'0	185'8
	5	190'8	190'8	191'6	191'5	190'3	190'3	192'5	190'5	187'9	186'7	185'0	184'9
	6	192'3	194'2	196'4	195'1	195'1	194'2	195'6	195'6	195'3	194'6	194'6	194'6
	7	198'4	198'2	197'2	195'3	195'0	197'2	198'0	198'4	197'7	196'9	197'7	199'5
	8	194'1	193'8	195'6	192'6	190'9	191'4	190'8	190'3	189'4	188'8	188'8	187'8
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	209'8	212'1	212'1	210'4	207'0	209'4	209'4	209'1	209'3	209'3	209'3	208'3
	11	207'3	207'3	210'0	209'1	210'0	210'0	209'1	205'1	203'3	203'3	202'9	202'8
	12	189'6	193'1	196'4	189'6	190'7	193'6	201'3	196'9	203'2	199'2	197'8	197'8
	13	190'2	188'3	186'9	186'2	188'8	189'2	188'7	188'3	193'1	208'7	206'1	200'2
	14	177'9	179'8	180'9	181'1	180'9	180'8	180'8	180'8	183'6	184'8	184'8	184'2
	15	177'2	177'2	177'2	177'2	174'7	175'9	175'9	175'2	174'8	174'2	172'2	172'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	186'5	186'5	189'7	185'9	186'9	188'3	190'0	190'8	189'2	189'2	188'2	185'3
	18	188'8	188'8	189'8	187'6	188'7	188'8	192'2	193'9	192'6	191'4	193'2	192'3
	19	198'7	198'7	198'7	197'6	195'9	196'7	197'9	195'9	196'7	196'0	196'2	198'6
	20	186'9	186'7	185'4	186'3	186'3	185'9	186'6	185'5	184'5	184'2	181'5	182'5
	21	179'8	180'3	181'3	181'3	178'0	178'0	177'3	178'2	178'2	180'0	179'8	181'1
	22	186'4	186'5	189'1	188'6	188'4	187'5	187'9	187'8	188'8	188'8	187'7	186'5
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	183'2	181'5	184'6	186'2	184'6	186'4	187'7	190'0	190'0	190'8	189'4	189'6
	25	186'8	187'5	186'8	185'3	181'1	182'8	183'0	184'2	184'2	184'9	183'9	182'9
	26	174'0	174'3	175'0	175'0	178'6	178'1	179'4	181'8	181'8	181'8	181'8	179'2
	27	173'4	172'7	175'3	175'1	174'4	174'4	175'2	174'5	174'5	173'8	173'8	173'6
	28	175'4	175'4	175'5	177'3	175'3	172'4	172'4	177'4	177'4	176'6	178'1	178'1
	29	174'1	175'0	184'8	179'4	181'2	181'8	184'2	186'7	185'7	184'6	182'5	182'5
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	187'2	187'2	186'9	187'1	184'4	183'5	185'4	185'4	184'5	182'4	179'7	179'7
Hourly Means	186'11	186'54	187'53	186'73	186'13	186'40	187'64	187'57	187'90	188'11	187'58	187'10	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
JANUARY.	1	54'4	55'0	54'2	54'3	54'2	54'6	54'6	54'6	54'5	54'5	54'3	54'4
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	45'8	46'0	46'5	46'4	46'4	46'2	46'4	46'4	46'3	46'3	46'7	47'2
	4	47'6	47'3	46'5	46'5	46'1	47'0	46'4	46'5	46'4	46'3	46'4	46'0
	5	42'2	42'0	42'0	41'7	41'6	41'9	42'1	42'7	43'7	44'4	45'6	45'7
	6	39'9	39'5	39'0	39'0	39'1	39'4	39'7	39'6	39'6	39'5	39'5	39'8
	7	36'9	37'1	37'1	37'2	37'1	37'3	37'8	38'1	38'1	38'1	38'1	37'3
	8	39'9	39'5	39'8	40'0	40'0	40'6	41'0	41'5	41'5	42'4	43'0	43'4
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	28'1	27'2	27'1	26'9	26'3	27'2	27'7	28'2	28'3	28'7	29'0	29'2
	11	25'6	25'7	27'0	27'0	27'1	27'3	28'0	29'2	30'0	31'0	31'7	32'0
	12	35'0	34'7	36'0	35'4	36'1	37'1	38'0	38'8	39'3	39'5	40'0	40'0
	13	41'6	42'3	42'0	42'0	42'3	42'6	43'0	43'4	43'4	43'6	44'2	44'5
	14	47'4	47'4	47'4	47'2	47'4	47'6	47'8	48'0	47'7	48'4	48'4	49'0
	15	49'6	49'7	49'7	49'6	50'0	49'8	50'2	50'5	50'9	51'4	52'1	52'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	43'8	43'8	45'0	44'4	43'9	43'7	43'7	43'5	43'5	44'0	44'4	45'0
	18	43'1	42'9	42'6	42'4	41'6	41'5	41'2	40'9	40'9	41'1	41'4	40'4
	19	36'2	36'1	36'1	37'2	37'8	38'3	38'3	38'5	38'8	38'8	39'1	39'1
	20	42'9	43'5	43'0	43'1	43'4	44'4	44'7	44'8	45'3	46'5	47'2	47'3
	21	46'7	46'5	46'5	47'2	47'4	47'8	48'4	48'7	48'9	49'3	49'2	48'4
	22	42'4	42'6	41'9	41'6	41'4	41'7	42'1	42'2	42'0	42'3	43'0	43'3
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	37'9	38'1	38'3	38'0	38'8	40'0	40'4	40'6	41'0	42'4	43'0	43'3
	25	43'4	43'6	43'5	43'8	44'3	45'0	45'2	45'7	46'2	46'6	47'3	47'4
	26	49'4	49'5	48'8	48'3	47'7	48'3	48'6	48'5	48'4	48'5	49'2	49'2
	27	50'2	50'0	50'0	50'2	49'8	50'0	50'9	51'2	51'2	51'7	51'7	51'8
	28	48'0	48'0	48'0	48'4	48'8	49'5	49'6	49'7	49'5	49'5	49'5	49'2
	29	47'4	47'4	46'7	46'4	46'6	46'6	46'7	47'2	47'3	47'2	47'4	47'5
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	43'4	43'5	43'5	43'6	43'7	44'6	44'6	44'7	45'2	46'0	46'9	47'2
Hourly Means	42'65	42'65	42'62	42'61	42'66	43'08	43'35	43'60	43'77	44'15	44'55	44'61	



VERTICAL FORCE.													12 <sup>h</sup> .
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.													
Mean Galtin- gen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
FEBRUARY.													
1	187'3	186'0	187'4	186'9	186'7	185'8	187'4	187'4	187'4	184'4	184'4	184'4	184'9
2	184'3	181'3	183'0	178'0	182'7	183'4	183'6	183'4	182'9	180'5	179'0	181'4	176'9
3	178'9	178'9	179'2	179'2	177'6	177'0	177'0	176'9	176'9	175'7	174'1	173'1	172'8
4	178'0	178'2	181'0	180'3	178'1	177'8*	177'8	177'3	177'5	178'2	176'9	176'9	176'9
5	179'5	179'5	179'4	178'6	178'3	176'1	177'7	177'7	179'4	178'8	180'4	180'9	180'9
6	—	—	—	—	—	—	—	—	—	—	—	—	—
7	193'1	192'8	191'7	193'5	192'3	191'0	192'7	193'9	195'6	194'0	191'2	191'7	195'3
8	192'9	193'6	193'6	195'3	191'1	190'6	195'3	191'4	194'0	193'7	187'7	187'8	190'9
9	178'4	189'2	189'2	185'3	186'0	186'1	189'2	189'2	193'6	197'5	192'2	195'4	190'3
10	187'5	191'1	191'9	189'3	186'2	187'9	190'7	193'5	194'1	194'8	194'3	194'3	194'3
11	199'3	202'5	201'5	200'5	197'0	196'8	198'7	198'9	199'7	198'9	196'7	196'7	196'4
12	198'2	198'2	198'7	196'3	194'9	192'7	194'4	192'3	191'4	191'1	189'6	189'4	189'1
13	—	—	—	—	—	—	—	—	—	—	—	—	—
14	191'7	191'3	198'7	181'1	182'6	182'9	183'1	183'3	181'8	181'8	184'8	187'1	182'0
15	183'7	183'9	188'6	180'0	180'9	181'9	185'1	185'5	185'5	185'5	182'2	180'9	180'9
16	185'2	187'1	185'9	178'6	175'3	175'3	176'5	177'5	178'1	178'1	176'7	176'7	176'7
17	182'4	182'3	182'1	179'4	177'3	175'9	176'4	177'8	177'8	177'1	174'6	174'9	175'9
18	178'7	180'0	178'9	178'1	176'0	175'3	173'4	173'4	173'3	173'1	170'5	171'7	172'7
19	173'3	178'0	179'5	176'5	176'5	176'3	173'3	175'3	175'2	173'8	172'2	173'4	173'4
20	—	—	—	—	—	—	—	—	—	—	—	—	—
21 <sup>a</sup>	147'8	100'4	161'0	193'4	190'1	185'0	192'0	191'3	193'9	180'0	250'2	243'7	194'2
22 <sup>b</sup>	172'5	170'5	179'1	179'8	179'8	179'8	179'8	184'4	176'3	185'7	184'2	182'5	185'3
23	174'3	177'9	177'2	172'6	172'8	174'9	174'7	181'1	182'4	180'8	182'6	181'8	181'8
24	129'9	127'9	156'9	175'7	180'0	186'3	181'8	183'9	188'9	192'6	199'0	192'6	188'2
25	178'4	173'9	183'3	189'4	188'5	188'5	188'5	189'5	191'5	188'9	190'7	189'7	189'1
26	184'5	183'5	186'1	181'8	177'9	180'6	181'5	180'9	183'4	180'9	180'2	180'2	178'9
27	—	—	—	—	—	—	—	—	—	—	—	—	—
28	181'2	179'8	181'7	181'7	181'1	184'1	181'2	183'1	180'4	180'6	181'4	180'4	179'9
29	179'8	182'6	182'6	182'0	180'2	178'6	178'6	180'1	180'9	181'7	182'6	182'9	182'9
Hourly Means	181'76	182'85	185'27	183'48	182'74	182'86	183'55	184'19	181'86	181'46	183'65	183'65	183'09
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
FEBRUARY.													
1	43'4	43'6	43'0	42'4	42'4	42'4	42'6	42'6	42'5	43'2	43'4	43'5	43'7
2	41'6	41'6	42'0	44'0	43'2	43'4	43'5	41'3	41'8	45'9	46'6	47'4	47'5
3	46'4	45'9	46'3	46'4	47'3	47'6	47'9	48'4	48'6	49'3	49'7	50'2	50'3
4	45'4	45'2	45'2	45'3	46'3	46'8	47'0	47'2	47'2	47'5	47'7	48'2	48'4
5	46'5	46'6	46'3	46'0	46'2	46'6	46'6	46'4	45'7	45'6	45'4	45'2	45'0
6	—	—	—	—	—	—	—	—	—	—	—	—	—
7	39'0	39'0	38'8	38'2	38'1	38'2	38'2	38'6	39'1	39'6	40'2	41'4	41'4
8	39'9	39'5	39'3	38'2	38'8	39'3	40'0	40'3	40'6	41'3	42'0	42'2	42'6
9	41'3	41'3	43'0	42'4	42'4	42'3	42'0	42'0	42'3	42'4	43'0	43'0	43'2
10	40'8	40'6	40'1	41'0	40'0	39'8	39'8	39'8	39'8	39'9	39'9	39'9	39'2
11	33'1	32'8	33'3	34'9	34'3	34'6	34'6	34'4	35'1	36'0	36'8	37'4	37'6
12	36'1	35'6	35'2	35'5	36'2	37'0	37'0	37'8	38'3	39'4	40'0	40'6	40'6
13	—	—	—	—	—	—	—	—	—	—	—	—	—
14	38'8	38'4	38'8	42'4	41'0	41'3	41'4	42'4	43'0	43'4	43'9	44'0	44'6
15	43'2	42'5	42'3	42'6	42'7	42'9	42'4	42'8	43'5	44'5	45'7	46'5	46'6
16	42'7	42'4	42'9	45'4	45'6	46'2	46'5	46'8	47'4	47'8	48'2	48'3	47'7
17	44'2	43'5	44'0	44'5	45'5	46'1	46'7	46'6	47'1	47'9	48'6	49'4	49'6
18	45'8	45'8	45'7	46'4	46'6	47'4	47'5	48'2	49'2	49'6	50'0	50'2	49'6
19	46'2	45'6	45'5	46'2	45'8	46'3	47'0	47'9	48'3	48'8	49'2	49'2	49'3
20	—	—	—	—	—	—	—	—	—	—	—	—	—
21 <sup>a</sup>	45'3	45'4	46'0	47'0	47'0	47'4	47'7	48'1	48'5	49'0	49'5	50'6	51'8
22 <sup>b</sup>	50'2	50'0	49'5	49'4	49'3	49'4	49'6	49'9	49'9	50'0	50'2	50'4	49'8
23	49'4	49'0	49'0	49'4	49'5	49'5	49'3	48'8	48'4	48'7	48'8	48'8	48'7
24	46'2	46'2	44'9	44'7	44'1	44'3	44'4	45'0	44'4	45'5	45'8	46'1	45'9
25	43'2	41'5	41'3	42'0	42'0	42'3	42'4	42'8	42'8	43'3	43'8	44'3	44'4
26	46'4	44'3	44'0	46'3	46'2	46'5	46'3	46'4	46'4	47'1	47'4	47'4	47'2
27	—	—	—	—	—	—	—	—	—	—	—	—	—
28	43'0	42'5	42'1	42'0	42'0	42'5	43'6	44'5	45'2	45'5	46'0	46'2	46'0
29	45'2	44'6	44'3	44'4	44'6	45'0	45'3	45'2	44'6	44'6	44'4	44'0	43'7
Hourly Means	42'95	42'52	42'49	43'07	43'08	43'42	43'57	43'88	44'10	44'64	45'07	45'37	45'34

\* Three minutes late.

\* Omitted in the Means, on account of disturbance.



VERTICAL FORCE.

One Scale Division = 000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

Temperature, 1'64.		Vertical Force												Daily and Monthly Means.
10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
184'4	184'4	184'9	184'6	185'1	184'7	184'7	184'7	183'4	183'9	184'2	181'4	181'5	181'3	185'25
179'0	178'0	176'9	178'0	178'0	178'5	179'1	179'0	180'1	180'0	180'0	178'9	178'9	178'9	180'39
174'1	173'1	172'8	172'8	174'6	174'6	174'6	178'2	178'2	177'4	177'7	177'9	177'9	178'2	179'0
176'9	176'9	176'9	175'5	175'5	175'5	176'9	176'9	176'7	178'7	179'7	179'8	178'8	179'5	176'82
180'4	180'9	180'9	180'9	181'2	181'2	181'3	181'3	180'1	180'1	172'6	172'3	182'5	193'5	177'85
191'2	191'7	195'3	195'7	196'2	198'8	198'8	195'5	190'8	191'2	192'6	193'0	192'6	189'2	180'12
187'7	187'8	190'9	192'6	195'5	192'2	191'6	190'9	178'3	185'9	179'7	177'3	176'3	177'8	193'72
192'2	195'4	190'3	190'6	192'1	187'7	186'9	189'2	187'7	187'9	187'2	187'2	187'5	187'5	189'25
194'3	194'3	194'3	194'3	195'0	196'6	196'6	196'8	196'8	197'3	197'3	197'3	201'5	203'5	188'88
196'7	196'7	196'7	196'4	197'4	197'4	197'4	197'4	197'3	196'9	197'3	198'0	198'0	198'0	191'39
189'6	189'4	189'6	187'4	187'4	188'7	188'0	186'9	196'8	195'6	195'0	191'6	192'3	191'7	198'09
184'8	187'1	184'8	182'0	180'0	181'5	185'8	181'2	181'6	181'6	177'6	171'1	180'6	183'0	192'53
182'2	180'9	180'9	181'8	183'4	183'7	184'5	185'3	186'2	186'1	184'1	181'3	181'1	183'0	189'72
176'7	176'7	176'7	176'7	177'8	178'0	178'0	181'1	181'6	176'5	177'5	179'4	181'5	182'4	189'25
174'6	174'9	174'6	175'9	176'1	173'5	173'5	174'8	174'8	174'8	175'9	177'2	177'9	177'7	188'88
170'5	171'7	172'7	172'0	172'0	175'6	173'2	173'7	175'3	171'7	177'2	172'8	172'8	172'8	191'39
172'2	173'4	173'4	174'8	176'1	178'1	179'4	179'8	190'1	189'8	166'4	168'3	118'1	156'6	174'35
250'2	243'7	194'2	197'6	221'3	141'8	210'0	179'2	193'6	163'8	176'8	178'8	179'3	167'5	184'95
184'2	182'5	185'3	184'1	181'7	184'1	181'3	172'8	181'2	135'2	143'9	148'7	152'4	163'0	174'05
182'6	181'8	181'8	185'8	169'7	182'6	170'1	168'7	159'5	140'9	124'9	150'0	117'5	123'0	168'23
199'0	192'6	188'2	190'9	193'3	186'1	161'0	163'8	159'9	151'9	119'1	137'2	139'2	164'6	170'15
190'7	189'7	180'2	189'8	181'6	180'6	178'4	180'6	182'1	181'4	181'4	181'6	181'4	180'6	181'27
180'2	180'2	178'9	180'3	181'4	178'6	182'2	183'4	181'0	181'0	181'4	181'5	181'0	181'2	182'15
181'4	180'4	182'6	179'9	179'2	179'0	178'9	178'8	179'0	178'9	177'8	177'6	176'9	174'9	179'94
182'6	182'9	182'9	182'9	182'6	187'2	178'7	181'1	185'1	185'8	186'7	186'7	186'7	186'0	182'71
183'65	183'65	183'09	183'25	183'10	183'53	182'14	182'40	181'93	180'72	178'25	179'14	178'67	179'76	182'47

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

43'4	43'5	43'7	44'0	43'4	44'0	44'0	44'0	44'0	43'4	43'2	43'1	42'8	42'4	43'21
46'6	47'4	47'5	47'3	47'3	47'0	46'6	46'4	46'3	46'3	46'2	46'2	46'2	46'3	45'33
49'7	50'2	50'3	49'8	49'5	48'9	47'7	47'6	46'6	46'2	46'0	45'7	45'1	45'9	47'65
47'7	48'2	48'4	48'3	48'3	48'1	47'2	47'0	46'8	46'6	46'4	46'4	46'3	46'4	46'88
45'4	45'2	45'0	44'0	43'6	43'0	42'5	42'3	38'8	39'0	39'0	39'1	39'3	38'9	43'65
40'2	41'4	41'4	41'4	41'4	41'6	41'4	41'0	40'6	40'2	40'0	39'8	39'7	40'0	39'57
42'0	42'2	42'6	42'6	42'7	42'8	42'9	42'8	42'6	42'6	42'5	42'3	42'1	41'9	41'55
43'0	43'0	43'2	43'3	43'2	43'3	43'1	43'2	42'7	42'4	42'4	42'4	42'5	41'8	42'51
39'9	39'9	39'2	39'0	38'3	37'9	37'7	36'8	36'4	36'0	35'1	34'1	34'0	33'7	38'32
36'8	37'4	37'6	37'3	37'3	37'0	37'0	36'4	36'5	36'6	36'4	36'2	36'2	36'1	35'75
40'0	40'6	40'6	40'9	41'3	41'2	41'2	—	—	—	—	—	—	—	38'32
43'9	44'0	44'6	45'0	45'4	45'4	45'0	44'9	44'9	45'2	44'6	44'4	44'5	44'2	43'20
45'7	46'5	46'6	46'0	45'6	45'4	45'0	44'4	43'8	43'4	43'7	43'7	43'6	43'2	41'00
48'2	48'3	47'7	47'7	47'2	45'8	45'9	45'6	45'2	44'8	44'7	44'4	44'0	44'2	45'72
48'6	49'4	49'6	49'8	49'4	49'0	49'0	48'7	48'5	47'5	47'0	47'0	46'7	46'1	47'20
50'0	50'2	49'6	49'4	49'3	49'3	49'3	49'3	49'3	48'3	47'6	47'4	47'0	46'6	48'12
49'2	49'2	49'3	49'3	49'3	49'1	48'6	48'5	—	—	—	—	—	—	46'98
49'5	50'6	51'8	53'0	53'8	54'2	51'4	55'0	54'8	54'8	54'3	53'4	51'0	50'2	50'51
50'2	50'4	49'8	49'6	49'5	49'0	48'7	48'5	48'4	49'0	51'2	51'9	49'5	49'3	49'67
48'8	48'8	48'7	48'2	48'0	47'9	49'6	49'6	49'4	48'6	48'6	47'5	47'3	46'5	48'60
45'8	46'1	45'9	45'4	45'0	44'8	44'5	44'5	44'4	44'4	44'4	45'0	46'6	46'4	45'13
43'8	44'3	44'4	46'4	47'6	48'2	48'0	46'7	46'6	46'6	45'4	45'4	45'5	46'4	44'51
47'4	47'4	47'2	47'0	46'8	46'4	45'7	45'5	—	—	—	—	—	—	45'48
46'0	46'2	46'0	46'3	46'4	46'2	46'4	46'3	46'2	46'2	45'4	45'0	44'9	45'0	44'81
44'4	44'0	43'7	43'3	43'2	42'6	42'8	43'2	43'2	42'6	42'6	42'6	42'4	42'5	43'79
45'07	45'37	45'34	45'29	45'20	45'00	44'83	44'61	43'82	43'55	43'29	43'13	43'14	43'09	43'93

VERTICAL FORCE.													
One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.													
Mean Giltting- gen Time.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.	
MARCH.	1	184.9	186.0	184.5	182.0	182.0	179.1	179.0	179.2	179.4	179.3	180.4	182.4
	2	186.3	187.2	188.5	188.9	188.9	187.8	187.3	187.0	186.8	186.2	186.2	186.1
	3	188.7	188.7	190.1	189.8	188.0	186.0	185.7	183.8	182.8	181.6	180.8	180.8
	4	186.4	188.0	188.0	183.8	179.5	178.9	178.9	179.4	179.7	181.4	183.2	184.6
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	192.2	193.5	192.4	189.9	187.2	186.5	184.5	184.5	186.3	186.7	185.6	185.6
	7	184.6	185.2	183.3	181.8	180.5	180.1	179.8	178.3	177.0	175.7	175.0	175.8
	8	174.8	172.4	171.2	171.2	169.5	169.3	169.9	170.6	170.2	170.2	174.5	170.3
	9	178.7	180.4	179.5	178.8	177.8	176.0	177.4	177.7	177.0	176.4	176.3	175.9
	10	186.8	187.0	186.4	183.8	180.3	177.6	177.6	178.3	178.3	176.2	175.0	175.8
	11	181.0	182.2	180.4	176.3	172.9	166.4	172.7	173.2	174.2	174.2	174.2	174.5
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	178.6	181.3	182.1	177.8	177.6	176.4	177.0	179.3	179.8	180.3	180.1	181.0
	14	184.3	184.3	184.3	177.8	181.5	181.8	182.8	183.8	185.7	185.5	185.3	185.3
	15	189.4	186.0	187.3	188.5	187.3	192.0	196.1	199.8	203.3	203.3	205.1	202.5
	16	194.3	195.8	195.0	193.4	193.4	192.1	190.8	191.8	190.9	189.3	188.5	188.6
	17	157.6	163.7	175.4	180.8	188.3	197.7	205.1	204.8	216.0	230.0	197.9	197.9
	18	188.8	187.9	189.3	185.2	183.8	182.6	182.6	182.7	185.4	186.6	184.6	186.7
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	136.8	146.4	167.0	172.7	180.6	186.5	188.8	209.9	225.5	224.9	209.5	207.7
	21	170.8	176.2	173.9	169.5	169.4	169.1	169.1	169.4	168.4	168.4	168.4	168.4
	22	176.3	176.1	174.9	173.3	172.6	172.6	173.5	174.8	174.8	174.2	175.2	175.5
	23	165.0	170.3	171.1	172.0	173.0	171.0	169.5	170.6	171.4	168.5	168.9	169.0
	24	166.0	169.0	168.3	166.8	166.5	168.1	169.2	171.8	171.6	168.6	168.1	168.3
	25	166.3	173.1	170.4	170.3	172.8	170.2	171.6	174.4	177.4	180.7	179.0	179.0
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	173.0	173.4	176.3	176.8	176.9	176.9	175.3	175.5	175.5	175.0	174.3	175.8
	28	176.4	176.8	176.7	174.9	173.1	172.0	173.3	173.4	171.2	170.6	170.5	168.1
	29	168.4	168.4	167.7	164.5	163.1	163.4	165.3	164.3	163.9	162.5	160.8	159.8
	30	163.8	165.1	164.2	162.2	161.3	161.3	161.3	162.1	163.2	163.9	163.7	163.9
	31	155.9	162.9	160.9	163.9	164.2	161.1	163.7	161.8	160.7	164.2	164.2	163.9
Hourly Means	176.15	178.05	178.86	177.66	177.48	177.13	178.07	179.34	180.64	179.90	179.09	179.01	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
MARCH.	1	42.4	41.6	42.4	42.7	43.0	43.7	44.3	44.1	45.0	44.9	45.3	45.3
	2	42.2	40.7	40.0	40.0	40.0	40.0	40.3	41.1	41.3	41.9	41.7	41.4
	3	39.7	39.7	39.6	39.0	39.4	40.6	41.3	41.9	42.7	43.4	44.0	44.0
	4	40.6	40.3	40.4	41.4	43.7	44.4	44.4	44.6	44.2	43.8	43.2	42.4
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	38.7	38.5	38.7	38.2	39.2	39.9	41.0	41.0	41.8	42.8	44.1	44.2
	7	43.6	43.6	43.8	44.5	44.4	44.5	45.4	45.9	47.1	48.1	48.2	48.2
	8	48.5	48.3	48.6	48.4	48.9	49.8	50.2	51.2	51.4	52.0	52.2	52.1
	9	47.1	46.5	46.4	46.0	46.3	46.6	46.7	47.0	47.3	48.2	48.5	48.6
	10	42.4	42.1	41.7	42.2	43.2	44.3	45.0	45.0	45.4	45.8	47.0	47.5
	11	44.4	44.0	45.0	46.0	46.8	47.4	47.6	47.6	48.0	48.3	48.8	48.4
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	45.4	44.4	44.4	44.8	44.4	44.5	44.4	43.9	43.7	44.1	44.3	44.5
	14	40.8	40.5	40.8	42.6	41.2	41.0	41.3	41.4	41.3	41.2	41.2	41.0
	15	35.3	35.1	35.3	36.0	36.1	36.3	36.4	36.4	37.2	37.2	38.0	38.0
	16	35.1	35.3	35.9	36.4	37.0	37.8	38.3	39.1	39.2	39.8	39.8	40.0
	17	40.5	40.5	40.8	40.6	40.6	41.2	41.6	41.8	42.4	42.5	42.6	43.7
	18	41.0	41.2	41.2	42.6	43.9	44.9	45.4	45.6	45.9	46.4	46.4	46.6
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	45.7	46.3	44.7	44.4	44.3	44.5	45.4	45.4	45.5	46.3	46.3	46.5
	21	49.0	48.8	49.4	50.6	51.3	52.1	52.5	53.2	53.4	54.2	55.0	55.2
	22	49.0	48.7	48.9	49.2	49.3	50.2	50.2	50.4	50.6	50.6	50.8	51.3
	23	54.4	53.4	52.2	51.5	51.8	52.2	52.8	52.8	52.4	52.2	53.0	53.2
	24	48.4	48.6	49.4	50.2	50.3	50.6	50.9	51.2	51.6	52.4	53.0	53.2
	25	51.2	50.8	51.1	51.3	51.1	51.2	51.0	51.4	51.6	52.1	52.5	52.6
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	47.3	47.1	47.2	47.1	47.3	48.2	49.2	50.2	50.4	51.2	51.4	51.4
	28	47.5	47.6	48.0	48.5	49.2	50.3	51.1	51.5	51.8	52.3	52.6	53.1
	29	52.2	52.4	53.2	54.0	54.8	55.0	55.0	55.2	55.6	56.4	57.3	58.2
	30	52.5	53.0	53.0	54.2	54.4	54.4	54.3	54.4	54.4	54.6	54.9	55.0
	31	53.0	52.8	52.3	52.2	52.9	54.0	54.7	55.2	55.4	56.2	57.2	57.2
Hourly Means	45.11	44.86	44.98	45.36	45.73	46.28	46.69	46.98	47.28	47.74	48.12	48.25	

VERTICAL FORCE.

One Scale Division = 000066 parts of the V. F. Increase in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
180°4	181°3	182°8	182°7	181°6	183°0	182°8	182°3	182°5	182°7	182°7	179°8	182°00
186°2	186°3	186°3	187°7	186°9	187°2	189°1	188°7	188°7	190°3	188°2	188°2	187°54
180°8	184°1	181°7	181°8	185°2	185°2	186°5	186°4	186°6	186°7	186°6	185°4	185°44
183°2	186°2	186°9	187°2	187°2	187°2	—	—	—	—	—	—	186°55
185°6	185°7	185°6	185°6	188°0	187°1	182°9	185°0	185°0	186°0	183°6	181°0	186°51
175°0	175°4	175°3	176°9	175°9	175°7	175°7	173°9	175°6	175°7	175°9	174°0	177°62
174°5	173°6	177°5	178°1	177°0	174°5	174°5	172°3	173°6	175°8	178°3	178°7	173°29
176°3	177°4	179°0	178°3	179°3	179°3	180°7	180°8	180°8	180°8	182°4	182°6	178°76
175°0	177°4	179°0	177°9	177°9	177°9	179°1	180°4	180°4	180°4	181°0	181°0	179°64
174°2	174°5	174°5	175°6	175°6	176°3	—	—	—	—	—	—	175°66
180°1	181°9	181°9	182°4	182°4	183°5	176°4	176°4	177°5	176°7	176°7	178°7	181°08
185°3	189°5	190°6	191°5	195°9	190°7	183°0	182°5	183°4	184°1	184°3	184°3	187°00
205°1	197°4	195°0	195°5	196°6	197°8	189°5	189°5	189°4	188°0	181°2	195°1	195°76
188°5	190°4	189°8	189°8	189°8	174°6	191°1	196°4	196°6	196°2	196°2	192°4	195°45
197°9	191°5	191°7	190°0	188°4	187°8	187°8	189°2	189°2	189°5	189°0	188°5	184°75
184°6	193°2	185°4	182°3	179°4	178°5	—	—	—	—	—	—	190°36
209°5	206°4	208°6	205°5	161°7	177°2	187°2	141°8	153°4	150°7	163°6	148°1	177°75
168°4	169°0	167°8	169°2	169°2	169°2	176°2	168°3	159°8	166°4	177°1	177°2	185°27
175°2	173°8	173°3	173°1	173°2	171°7	166°9	166°2	161°7	165°0	164°9	164°4	170°06
168°9	169°1	170°0	170°0	171°9	172°5	171°9	169°9	157°7	156°6	162°8	161°9	171°90
168°1	168°3	168°5	168°5	169°0	168°2	168°2	172°4	174°4	175°3	168°8	157°0	168°61
179°0	173°9	172°4	169°8	169°7	169°4	—	—	—	—	—	—	169°62
174°3	175°3	173°5	173°5	174°3	168°3	172°7	169°7	169°6	160°9	166°0	166°1	171°72
170°5	168°1	168°7	168°5	168°5	168°6	168°6	173°9	174°1	174°1	169°0	169°1	175°14
160°8	159°8	159°7	160°7	167°3	161°8	161°8	171°0	171°0	169°5	169°5	169°5	171°16
163°7	174°0	170°1	164°7	162°9	159°2	155°7	153°9	157°3	157°4	148°8	148°8	162°79
164°2	166°4	166°1	164°3	151°4	155°1	160°3	163°5	161°9	148°2	159°1	159°5	161°05
179°09	179°01	179°03	179°59	179°57	179°46	177°77	176°91	177°01	175°11	175°01	174°21	175°03
174°14	174°14	174°14	174°14	174°14	174°14	174°14	174°14	174°14	174°14	174°14	174°14	177°68

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

45°3	45°3	45°0	41°4	41°3	41°4	41°2	41°0	43°4	43°4	43°4	43°5	43°8
41°7	41°4	41°6	42°0	42°0	41°7	41°4	40°8	40°0	40°0	40°0	40°0	40°8
44°0	44°0	43°8	43°0	43°0	42°3	41°7	41°4	41°0	40°6	40°7	40°9	41°49
43°2	42°4	41°6	40°8	40°5	40°3	40°1	40°0	—	—	—	—	40°57
44°1	44°2	44°2	44°0	44°0	43°4	43°4	43°4	31°7	35°1	35°5	36°3	37°0
48°2	48°2	48°6	49°0	48°7	48°7	48°8	48°8	49°0	49°0	48°8	48°8	48°7
52°2	52°1	52°0	51°7	51°3	51°2	50°6	50°4	49°9	49°3	48°3	47°5	47°4
48°5	48°6	48°4	47°8	46°8	46°3	46°3	45°6	45°3	45°0	44°6	44°5	44°1
47°0	47°5	47°4	46°5	46°0	45°8	45°4	45°0	44°8	44°4	44°4	44°4	44°4
48°8	48°4	48°2	48°4	48°2	47°4	47°3	47°1	—	—	—	—	46°79
44°3	44°5	44°4	44°0	43°4	43°3	43°3	42°5	42°3	42°1	42°0	41°7	41°3
41°2	41°0	40°3	40°0	39°4	38°0	37°5	37°6	39°2	40°0	39°3	37°1	36°2
38°0	38°0	38°2	37°8	37°5	37°1	36°1	35°3	35°2	31°9	35°0	35°0	34°9
39°8	39°0	40°0	39°5	39°3	39°6	39°3	39°1	39°1	39°4	39°5	40°0	40°8
42°6	43°7	43°5	43°5	43°4	43°0	42°9	42°9	42°5	42°0	41°4	41°6	41°7
46°4	46°6	47°0	47°1	47°3	48°0	48°0	47°8	—	—	—	—	45°56
46°3	46°5	47°3	48°0	48°4	48°4	48°2	48°4	48°9	48°8	48°6	48°5	48°6
55°0	55°2	55°2	54°5	54°0	53°3	53°0	52°4	52°0	51°3	50°7	50°2	49°2
50°8	51°3	51°1	52°0	51°6	52°2	52°2	51°9	52°0	53°0	54°2	54°2	54°4
53°0	53°2	53°0	52°8	52°9	52°2	51°6	51°3	51°1	51°0	50°7	50°0	49°4
53°0	52°5	53°0	53°4	53°4	52°7	54°0	55°0	54°8	53°0	52°8	51°6	51°3
51°4	51°4	51°2	50°8	50°4	49°9	49°6	49°4	48°8	48°5	48°3	48°1	47°8
52°6	53°1	53°2	53°0	52°5	52°6	52°4	52°4	51°9	51°8	51°8	51°6	52°2
57°3	58°2	58°4	58°2	58°0	56°8	56°2	55°8	55°7	55°4	55°0	54°1	54°1
54°9	55°0	54°8	54°4	54°5	54°4	54°4	54°2	54°0	53°7	53°3	53°1	53°1
57°2	57°2	58°0	58°1	57°6	59°4	59°6	57°0	56°1	55°1	54°3	54°3	54°1
48°12	48°25	48°24	48°06	47°84	47°57	47°46	47°26	46°58	46°41	46°26	46°06	46°12
45°84	45°84	45°84	45°84	45°84	45°84	45°84	45°84	45°84	45°84	45°84	45°84	46°71

VERTICAL FORCE.													
One Scale Division = .000005 parts of the V. E. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.													
Mean Galtin- gen Time. )	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .	
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
APRIL.	1	161'8	161'8	169'4	169'7	169'8	167'6	168'1	170'8	170'9	171'0	171'7	171'9
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	151'6	163'7	168'4	171'9	175'6	177'3	180'6	186'8	183'6	181'3	187'1	178'5
	4	169'5	168'0	167'5	166'9	165'6	165'0	168'3	167'9	168'9	170'4	171'1	173'1
	5	172'2	171'8	169'3	168'0	166'6	166'5	166'5	166'5	167'7	171'4	171'7	173'5
	6 <sup>a</sup>	171'7	174'5	168'5	166'1	165'8	161'6	164'6	164'7	168'9	168'0	165'5	163'1
	7	149'4	151'9	150'8	149'7	166'1	170'4	174'8	180'4	188'7	182'8	186'6	174'3
	8	172'5	171'5	172'0	170'0	168'3	168'3	166'5	166'1	165'9	165'1	162'6	161'6
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	166'2	164'9	164'9	161'8	158'8	157'1	155'7	155'7	155'7	154'9	151'1	152'7
	11	155'7	155'9	157'2	157'2	157'2	155'9	155'9	157'5	158'5	159'4	159'4	158'7
	12	164'0	162'7	161'3	160'6	157'4	158'0	158'0	159'4	159'4	159'0	157'6	157'1
	13	163'0	163'3	163'0	164'8	161'0	163'9	163'6	163'0	163'6	163'6	164'4	164'4
	14	173'4	171'7	172'0	170'0	168'9	167'4	167'4	166'6	167'2	167'0	166'2	164'9
	15	169'6	166'9	166'0	163'0	161'9	161'8	162'4	162'2	166'8	169'4	170'2	173'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	169'3	167'8	165'7	163'4	159'8	161'5	161'5	162'8	165'7	173'3	177'1	182'6
	18	174'5	174'2	174'2	171'2	172'0	167'9	167'9	171'7	175'7	177'3	176'4	178'9
	19	181'4	181'3	177'5	175'7	175'5	174'8	174'0	171'7	172'9	172'5	172'1	172'5
	20	175'4	173'9	171'3	169'9	170'1	169'0	169'5	169'9	169'5	169'6	169'6	168'4
	21 <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	22	171'3	169'4	164'6	164'6	165'5	165'5	165'0	162'9	165'4	165'4	165'4	164'5
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	171'8	171'8	171'9	171'8	171'9	168'3	166'1	169'7	169'7	169'3	171'6	170'6
	25	174'9	174'4	170'5	170'5	170'5	169'4	169'4	167'5	167'5	167'5	167'5	167'5
	26	170'4	168'9	166'5	166'2	165'6	166'2	167'7	166'7	167'0	166'8	166'8	166'5
	27	171'1	168'8	167'6	165'4	164'3	163'0	163'0	163'0	163'0	162'7	162'2	161'3
	28	165'5	165'5	166'6	165'7	164'9	163'7	163'7	166'3	164'9	164'9	165'6	165'2
	29	159'8	159'0	159'7	165'5	157'7	160'0	160'0	166'8	165'2	171'2	173'1	174'5
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	167'71	167'48	166'87	166'37	166'00	165'59	165'90	167'04	167'97	168'50	169'13	168'54	
TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
	1	2	3	4	5	6	7	8	9	10	11	12	
APRIL.	1	52'7	52'7	52'6	51'5	51'3	51'6	51'5	51'2	50'8	50'8	50'8	50'4
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	45'2	46'0	46'9	47'4	48'5	49'4	50'2	50'8	51'0	51'2	51'6	52'0
	4	53'2	53'1	53'0	53'2	53'3	53'4	53'4	53'5	53'4	53'6	53'7	53'6
	5	51'2	51'8	52'2	52'3	52'4	52'6	53'2	53'4	54'0	54'2	54'2	54'4
	6 <sup>a</sup>	50'8	51'2	52'0	54'2	53'1	53'8	54'2	54'2	54'7	55'2	56'0	56'2
	7	54'0	54'2	55'0	55'3	55'7	56'0	56'1	56'2	56'2	56'3	56'8	56'8
	8	51'2	51'5	52'3	53'6	54'2	54'7	55'0	55'4	56'0	56'6	57'4	57'9
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	55'0	55'5	56'2	57'4	58'6	59'0	59'2	59'5	60'0	60'6	61'2	60'5
	11	59'8	59'6	59'2	59'2	58'7	59'0	59'2	59'0	59'0	59'0	59'0	59'2
	12	55'2	56'2	56'2	56'4	57'1	57'4	57'5	57'8	58'1	58'5	59'2	59'2
	13	55'3	55'3	55'1	54'5	54'2	54'2	54'2	54'2	54'2	54'2	54'2	54'2
	14	50'2	50'4	50'5	51'0	51'2	51'4	52'0	52'3	52'8	53'2	53'8	54'1
	15	51'4	53'0	54'0	54'3	54'8	55'4	55'4	55'6	56'2	56'5	57'2	57'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	53'2	53'8	54'4	54'5	54'5	54'5	54'4	54'7	55'2	55'4	55'2	55'8
	18	50'8	50'3	50'3	50'1	50'0	50'1	50'1	49'8	49'2	49'2	49'1	48'8
	19	44'4	45'0	45'8	46'8	47'2	48'0	48'4	48'8	49'1	49'6	50'2	50'8
	20	48'5	48'6	49'8	50'2	50'4	50'7	51'0	51'4	51'8	52'3	53'0	53'3
	21 <sup>b</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	22	54'0	53'4	53'5	53'5	53'2	53'4	53'9	54'7	55'1	55'5	56'2	56'3
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	47'7	47'5	48'0	48'0	48'0	49'0	49'4	49'6	50'3	50'4	50'4	50'5
	25	46'8	47'4	48'4	49'2	49'5	49'8	50'1	50'2	50'8	51'4	51'6	51'6
	26	50'2	51'0	52'1	52'2	52'3	52'5	52'2	52'1	52'2	52'4	52'6	53'0
	27	49'4	50'0	50'4	51'9	52'2	52'6	53'2	53'3	53'7	54'4	55'0	55'2
	28	52'3	52'1	51'5	51'4	51'4	51'9	52'0	52'2	52'2	52'8	53'2	53'4
	29	53'3	53'1	53'3	53'3	53'6	54'2	54'4	55'2	55'2	55'4	56'2	56'2
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	51'52	51'80	52'20	52'49	52'71	53'08	53'30	53'52	53'76	54'07	54'43	54'54	

\* Omitted in the Means, on account of disturbance.

b Good Friday.

re. 1864.

10%.	11%.
171°7	171°9
171°1	173°1
171°7	173°5
165°5	163°1
186°6	174°3
162°6	161°6
151°1	152°7
159°4	158°7
157°6	157°1
164°4	164°4
166°2	161°9
170°2	173°2
177°1	182°6
176°4	178°9
172°1	172°5
169°6	168°4
165°4	164°5
171°6	170°6
167°5	167°5
166°8	166°5
162°2	161°3
165°6	165°2
173°1	174°5
169°13	168°54

VERTICAL FORCE.													
One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.													
12%.	13%.	14%.	15%.	16%.	17%.	18%.	19%.	20%.	21%.	22%.	23%.	Daily and Monthly Means,	
172°9	173°3	174°6	172°9	163°2	169°0	167°0	167°3	161°1	161°9	157°0	162°5	168°01	
180°4	177°0	177°9	174°7	168°6	167°0	160°6	155°7	160°3	168°2	160°8	169°5	172°34	
173°1	171°2	171°2	170°8	169°9	167°4	167°4	167°4	165°8	159°6	167°4	169°5	168°45	
169°9	168°4	168°4	168°4	164°9	91°8	124°5	140°9	144°0	161°0	160°6	168°7	160°97	
163°6	165°4	171°9	183°0	173°9	124°5	119°0	96°1	193°0	70°7	126°5	116°5	154°59	
169°7	173°4	170°2	168°4	168°6	160°8	160°8	169°9	169°8	169°8	160°9	165°6	168°08	
160°6	160°6	160°6	163°5	163°5	163°8	166°7	166°7	155°5	158°2	164°4	164°7	164°97	
152°6	152°6	152°6	151°8	152°7	152°7	147°0	151°2	151°5	155°3	155°3	155°6	155°68	
158°7	158°7	158°6	158°4	158°4	158°4	158°4	158°9	159°1	159°4	160°0	162°1	158°23	
157°1	156°6	156°6	157°0	157°4	157°0	158°1	158°8	158°8	160°0	160°0	160°0	158°83	
164°4	164°2	164°5	166°2	167°4	168°9	169°7	169°7	169°9	169°7	169°7	171°2	165°84	
165°6	165°6	165°6	165°6	165°4	164°7	164°7	166°5	167°0	168°6	168°5	169°6	167°50	
173°2	175°3	182°9	179°8	172°8	154°4	163°0	161°0	163°3	165°3	165°3	167°2	167°37	
188°5	186°8	173°7	168°0	166°0	161°2	145°4	160°7	167°0	168°9	169°4	171°9	168°37	
177°5	176°9	179°4	173°4	177°1	176°7	176°0	176°0	178°7	178°7	180°2	182°1	175°62	
173°5	174°5	170°4	169°2	168°8	169°6	169°8	169°7	171°3	171°9	171°3	172°5	173°09	
169°2	170°7	170°7	168°0	168°0	168°1	166°3	120°4	112°2	125°1	149°2	152°2	161°92	
162°7	163°0	163°1	163°0	162°9	162°7	168°0	168°0	168°0	169°6	169°6	169°9	165°83	
169°9	170°0	169°8	172°3	168°6	173°0	173°0	173°7	173°7	173°7	173°3	173°2	171°17	
167°5	167°5	167°5	168°6	168°6	169°2	169°4	170°2	170°2	170°4	170°4	170°4	169°46	
166°8	166°5	167°4	167°4	166°5	167°1	167°1	167°5	168°5	168°5	168°9	168°6	167°30	
162°2	161°3	161°8	161°8	161°8	161°8	162°9	163°8	163°8	164°0	164°1	165°5	163°73	
165°6	165°2	162°7	161°6	163°1	149°3	142°9	148°2	144°2	141°5	153°8	154°0	159°69	
173°1	174°5	170°7	169°6	166°4	150°0	143°2	145°4	159°4	159°4	164°4	162°1	162°86	
168°73	167°91	167°82	166°97	165°68	160°33	160°52	160°73	161°02	162°99	164°93	166°46	165°88	

50°8	50°4
51°6	52°0
53°7	53°6
54°2	54°4
56°0	56°2
56°8	56°8
57°4	57°9
61°2	60°5
59°0	59°2
59°2	59°2
54°2	54°2
53°8	54°1
57°2	57°2
55°2	55°8
49°1	48°8
50°2	50°8
53°0	53°3
56°2	56°3
50°4	50°5
51°6	51°6
52°6	53°0
55°0	55°2
53°2	53°4
56°2	56°2
54°43	54°54

TEMPERATURE OF THE VERTICAL FORCE MAGNET.													
50°3	50°0	49°6	49°6	49°4	49°3	46°7	46°4	46°2	46°0	45°9	45°9	49°72	
52°0	52°0	52°0	52°2	52°0	52°2	52°0	52°1	52°3	52°7	53°1	53°4	50°76	
53°4	53°2	53°2	53°0	52°5	52°0	51°8	51°7	51°8	51°8	51°8	51°4	52°84	
54°8	54°8	54°6	54°3	54°4	55°1	56°2	56°2	55°6	55°4	55°0	52°1	53°93	
56°3	56°4	56°2	55°6	56°8	57°0	56°4	56°4	56°7	57°3	56°4	55°5	55°11	
57°2	57°4	57°0	56°2	55°6	54°9	54°2	53°8	53°3	53°0	52°6	52°2	55°25	
58°2	58°2	58°0	58°2	58°0	58°0	56°7	56°4	56°1	56°1	55°4	55°4	55°85	
60°5	62°0	61°8	63°0	62°2	61°7	61°8	61°0	60°6	60°4	60°5	60°3	59°94	
58°9	58°7	58°4	58°4	58°3	58°2	58°2	58°0	57°4	56°8	56°5	56°1	58°49	
59°2	59°3	59°1	58°6	58°4	58°4	58°2	58°0	57°6	57°2	56°5	55°9	57°72	
54°2	54°0	53°6	52°7	52°2	51°9	51°3	51°1	50°9	50°4	50°0	50°1	53°18	
53°8	53°2	53°1	53°0	53°0	52°9	52°7	52°5	52°3	51°9	51°4	51°2	52°23	
57°0	57°4	57°1	57°2	57°5	58°0	55°7	55°3	54°6	54°2	54°1	53°4	55°52	
56°1	55°8	55°5	55°7	55°3	55°2	55°0	54°2	54°0	53°7	52°7	51°6	54°60	
48°4	48°3	48°3	48°4	48°2	48°2	48°2	47°8	46°7	46°4	45°7	45°3	48°65	
51°0	51°2	52°2	52°2	51°7	51°0	50°2	50°0	49°5	49°5	49°5	49°3	49°22	
54°0	53°6	53°2	53°2	53°0	52°7	54°2	54°2	55°4	56°2	56°6	55°2	52°60	
56°7	57°0	56°5	56°0	55°8	55°5	50°3	49°6	49°4	48°7	48°4	48°0	53°52	
50°4	50°2	50°0	49°8	49°4	49°0	48°5	48°3	47°8	47°4	47°0	46°6	48°83	
51°6	51°3	51°2	50°8	50°6	50°6	50°5	50°2	49°9	49°9	49°8	50°0	50°13	
53°1	52°6	52°4	52°0	51°9	51°6	51°4	51°3	50°8	50°4	50°2	49°6	51°75	
55°0	55°0	54°7	54°6	54°4	54°2	54°1	53°8	53°5	53°2	52°8	52°6	53°30	
54°0	54°4	54°7	54°5	54°5	54°4	54°4	54°4	54°1	53°8	53°9	54°0	53°23	
56°0	56°2	55°4	55°1	54°3	53°6	52°8	52°4	52°2	51°5	51°2	51°6	53°99	
54°58	54°60	54°42	54°29	54°03	53°86	53°27	52°99	52°70	52°46	52°20	51°79	53°27	

VERTICAL FORCE.												
One Scale Division = 0.00066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1' 64.												
Mean (altit. gen Time.)	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	169°0	168°6	168°6	166°5	165°4	161°9	161°3	166°6	169°7	170°7	173°0	169°0
2	166°8	167°5	167°9	165°7	162°4	159°5	160°5	159°7	160°2	158°3	157°8	157°8
3	158°1	158°2	155°5	154°7	153°6	151°9	151°3	154°1	155°0	155°7	155°3	156°4
4	155°4	155°4	155°4	153°9	151°2	148°2	149°2	149°2	152°3	151°8	153°3	153°4
5	151°3	152°1	149°7	147°9	145°8	146°0	143°4	141°7	141°2	141°2	140°7	140°5
6	148°5	146°5	144°5	143°1	141°1	139°1	139°4	139°0	139°0	139°7	140°2	138°0
7	—	—	—	—	—	—	—	—	—	—	—	—
8	150°4	150°8	157°5	141°2	149°2	149°7	153°8	157°8	165°8	171°5	166°2	164°4
9	155°6	153°8	150°8	150°8	150°7	150°7	150°7	150°7	152°2	162°0	161°2	159°9
10	126°6	128°3	134°2	135°7	148°3	152°4	150°4	152°8	153°3	155°5	159°5	163°4
11	151°3	151°3	158°4	160°0	160°0	159°9	159°0	157°7	159°4	159°4	158°5	158°7
12	163°3	162°0	160°9	159°3	159°9	155°0	155°0	150°3	158°0	160°9	161°7	160°1
13	165°0	161°3	163°0	163°1	162°9	160°8	161°4	161°7	164°9	165°3	162°7	163°0
14	—	—	—	—	—	—	—	—	—	—	—	—
15	165°3	163°1	160°5	158°5	157°2	155°7	155°2	155°2	155°2	155°2	157°6	155°8
16	156°2	159°8	152°2	145°8	149°7	150°5	149°7	149°7	153°3	155°4	156°9	156°4
17	155°4	152°6	152°6	151°6	149°6	147°9	149°1	152°5	157°9	153°3	152°2	150°9
18	131°3	137°3	149°2	149°8	148°9	151°2	150°6	160°8	154°9	148°5	146°4	143°7
19	151°0	151°3	149°7	145°2	140°4	139°4	141°1	141°6	142°6	141°1	143°8	143°5
20	130°9	131°2	137°9	137°9	139°0	139°0	137°2	137°2	133°8	137°9	137°5	138°6
21	—	—	—	—	—	—	—	—	—	—	—	—
22	147°0	146°3	146°3	145°6	142°9	141°5	140°5	143°3	143°3	144°9	144°6	144°9
23	147°9	147°9	146°5	147°1	147°1	145°9	145°4	145°9	147°2	147°9	147°9	147°7
24	149°2	148°8	148°8	144°1	142°0	140°5	139°3	140°4	143°1	140°1	140°1	139°0
25	141°9	141°2	141°3	143°9	142°6	140°8	140°1	140°1	142°2	142°5	140°7	141°8
26	143°4	142°8	145°2	140°2	138°0	137°7	137°1	137°3	138°0	138°0	138°0	138°2
27	142°8	140°2	137°1	138°0	143°1	140°0	142°7	147°2	149°5	148°2	148°4	152°7
28	—	—	—	—	—	—	—	—	—	—	—	—
29	140°0	140°0	140°0	135°8	135°8	135°2	137°2	137°0	137°6	137°6	135°7	135°7
30	138°7	138°1	135°8	135°2	133°9	133°9	131°3	135°4	133°1	136°2	136°9	137°6
31	148°6	147°5	146°4	142°4	142°1	145°0	143°9	144°4	146°1	150°5	152°1	151°5
Hourly Means	149°63	149°48	149°59	148°26	148°22	147°49	147°66	148°32	150°34	150°69	150°46	150°32
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
	1	2	3	4	5	6	7	8	9	10	11	12
	51°0	50°7	50°7	51°2	51°7	52°6	53°0	53°2	53°4	53°8	54°1	54°1
1	51°0	50°7	50°7	51°2	51°7	52°6	53°0	53°2	53°4	53°8	54°1	54°1
2	52°2	52°2	52°4	53°0	51°0	51°8	55°2	56°1	56°8	57°5	58°2	58°2
3	56°3	57°0	57°3	58°2	59°2	59°7	60°0	60°0	60°0	60°5	61°0	61°4
4	58°1	58°3	58°4	58°8	59°2	59°5	60°0	59°4	60°2	60°2	60°0	59°6
5	59°6	60°8	61°8	61°5	62°5	63°5	64°0	64°5	65°4	66°0	66°4	66°3
6	63°2	63°7	64°1	64°3	65°0	65°5	65°8	66°5	67°0	67°7	68°3	69°2
7	—	—	—	—	—	—	—	—	—	—	—	—
8	60°0	60°0	60°0	60°4	60°0	60°5	60°6	61°3	60°4	61°7	62°2	62°0
9	58°8	59°1	59°2	60°4	60°7	61°0	61°2	61°0	61°2	61°0	61°0	61°5
10	59°3	60°0	60°3	60°3	60°9	60°7	61°0	61°5	61°9	62°0	62°2	61°4
11	57°2	57°0	57°0	57°0	57°1	57°4	57°5	57°5	57°2	57°2	57°4	57°5
12	54°3	54°4	55°0	55°6	56°4	57°1	57°2	57°6	58°0	58°6	59°2	59°4
13	51°2	54°1	54°0	54°5	54°5	53°7	53°4	53°5	54°1	54°5	55°2	54°6
14	—	—	—	—	—	—	—	—	—	—	—	—
15	53°2	53°8	54°7	55°2	55°6	56°2	57°1	57°2	57°7	57°7	57°9	58°0
16	56°6	57°0	57°2	57°4	58°0	58°4	58°8	59°2	59°4	59°8	60°0	60°0
17	57°2	57°4	58°2	58°2	59°2	60°2	60°4	60°2	60°5	61°5	62°0	62°3
18	60°2	60°3	61°0	61°0	61°5	62°0	62°4	63°1	63°5	64°1	65°0	66°2
19	62°4	62°4	62°5	63°7	64°8	65°7	66°7	68°1	68°5	69°3	69°3	69°0
20	64°7	64°5	64°7	65°4	65°7	66°5	67°3	67°7	68°0	68°5	68°5	68°3
21	—	—	—	—	—	—	—	—	—	—	—	—
22	63°0	62°9	62°7	63°4	63°6	64°0	64°5	64°3	64°4	64°6	64°8	65°0
23	62°0	62°0	62°2	61°8	61°7	61°8	61°7	61°6	61°5	61°7	62°4	62°6
24	60°3	60°5	60°7	61°2	61°8	62°5	63°0	63°8	64°7	65°5	66°3	67°3
25	63°5	63°5	63°5	63°5	63°9	64°8	65°3	66°0	66°5	67°2	68°5	68°8
26	64°7	64°8	65°5	65°4	65°6	65°7	65°9	66°5	66°5	67°0	67°3	67°6
27	63°5	63°5	63°6	64°4	64°5	64°9	65°3	65°5	65°5	66°5	67°0	67°4
28	—	—	—	—	—	—	—	—	—	—	—	—
29	65°5	65°8	66°0	65°8	66°3	66°5	67°0	67°6	68°0	68°6	69°4	69°5
30	65°7	66°5	67°0	67°0	67°5	67°5	67°5	67°7	67°9	67°9	68°5	67°5
31	60°0	60°0	60°0	60°0	60°3	60°1	60°1	60°0	60°4	60°5	60°5	60°7
Hourly Means	59°51	59°71	59°99	60°32	60°79	61°21	61°54	61°85	62°15	62°61	63°05	63°16

VERTICAL FORCE.

One Scale Division = '000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, U° 64.

Temperature, U° 64.		Vertical Force												Daily and Monthly Means.
10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
173.9	169.0	170.0	169.7	161.1	161.1	161.2	157.6	157.8	157.8	157.5	161.4	159.9	166.1	164.89
157.8	157.8	157.8	159.7	161.4	155.3	158.9	158.5	157.9	160.2	157.7	149.3	147.9	156.3	159.38
155.3	156.4	151.7	152.8	153.4	148.3	151.1	151.1	152.8	152.3	153.1	151.1	141.4	151.0	153.16
153.3	153.4	153.6	152.8	153.5	152.3	153.3	154.4	154.3	154.3	151.4	154.8	154.3	154.3	153.12
140.7	140.5	140.2	144.3	142.2	145.4	144.6	144.0	142.2	140.5	140.5	140.6	145.8	147.5	144.41
140.2	138.0	138.0	136.8	138.6	138.8	138.8	139.3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	151.5	137.5	131.0	131.0	131.5	132.3	139.76
166.2	164.4	164.4	161.5	159.6	159.3	155.9	151.3	149.3	144.9	149.4	151.6	151.6	155.2	153.14
153.9	152.9	150.9	150.6	150.7	150.2	150.2	150.2	150.2	149.9	150.9	151.1	151.1	140.8	151.82
159.5	163.4	161.1	157.9	155.2	159.0	140.9	152.7	151.2	140.6	142.2	141.6	153.4	153.4	148.75
158.5	158.7	158.0	157.5	158.3	157.3	157.3	157.3	159.4	159.6	159.6	159.8	161.0	163.0	158.65
161.7	160.1	160.1	157.8	157.8	157.8	158.0	154.4	154.7	158.8	159.8	161.8	161.5	163.9	158.99
162.7	163.0	—	163.2	166.2	166.2	164.2	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	162.3	163.9	161.5	164.4	165.8	166.5	161.15
157.6	155.8	155.4	156.1	155.8	150.2	156.2	155.4	155.4	156.5	155.9	155.9	157.1	157.1	156.98
156.9	156.4	153.9	150.5	149.9	151.5	151.5	153.2	153.2	153.8	151.7	156.2	157.4	157.5	153.29
152.2	150.9	150.3	150.3	153.3	158.7	161.1	161.1	150.3	133.6	129.5	122.3	144.2	144.5	140.19
146.4	143.7	151.9	208.2	190.1	151.8	166.8	151.7	153.2	148.2	148.2	149.2	150.7	151.0	151.02
143.8	143.5	140.2	140.2	139.4	139.4	137.4	137.7	132.9	125.0	134.1	130.3	133.5	130.9	139.78
137.5	138.6	—	137.6	137.6	138.6	137.9	138.5	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	140.7	130.0	139.9	141.0	144.2	146.6	137.97
144.6	144.9	143.6	143.5	143.1	143.4	143.4	143.7	143.5	144.6	145.2	145.2	145.2	145.5	144.21
147.9	147.7	147.3	146.7	148.0	148.8	148.8	148.8	148.8	149.0	149.0	149.3	149.5	148.5	147.79
140.1	139.0	142.7	147.4	144.6	144.8	144.2	144.2	144.7	140.2	141.2	137.6	143.9	143.9	142.73
140.7	141.8	141.8	140.2	140.2	140.0	145.0	136.4	128.4	138.3	141.5	143.5	144.6	141.8	141.37
138.0	138.2	138.0	138.0	135.3	133.7	137.6	139.3	122.4	119.0	117.1	133.5	143.7	140.6	139.34
148.4	152.7	147.6	143.7	141.5	140.8	139.8	138.8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	141.0	138.4	133.9	132.7	138.7	138.7	141.99
135.7	135.7	133.9	133.5	133.3	133.8	133.8	131.6	132.6	133.7	133.7	133.7	133.9	139.3	135.60
136.9	137.6	138.2	138.9	140.2	140.0	140.0	140.4	142.9	140.6	141.0	141.0	148.5	149.9	138.78
152.1	154.5	154.5	153.7	155.8	172.3	159.9	141.8	135.9	132.1	151.1	154.3	156.1	157.8	149.12
150.46	150.32	150.07	151.60	150.60	149.79	149.62	147.93	147.13	144.57	145.67	146.12	148.94	149.89	148.87

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

53.8	54.1	54.3	54.2	54.2	54.5	54.3	53.8	53.4	52.8	52.2	52.3	52.4	52.4	52.89
58.2	54.2	58.0	58.0	57.8	57.6	57.4	57.2	56.6	56.8	57.0	57.0	56.8	56.2	56.13
61.0	61.4	61.5	61.4	61.2	61.3	60.7	60.5	60.0	59.7	59.2	58.9	58.6	57.6	59.63
60.0	59.6	59.6	59.2	59.0	59.0	59.0	59.0	58.8	58.9	59.0	59.0	59.0	59.2	59.18
66.4	66.3	66.0	65.6	65.5	65.5	65.2	64.7	64.5	64.3	64.0	63.7	63.2	63.2	64.07
68.3	69.2	69.1	68.7	68.4	68.3	68.1	68.0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	63.0	62.5	61.9	61.2	61.8	61.0	65.51
62.2	62.0	61.5	61.3	61.3	61.5	61.2	61.0	60.5	60.2	60.0	59.5	59.2	58.2	60.60
61.0	61.5	61.4	61.2	61.1	60.6	60.3	60.3	60.3	60.0	59.8	59.7	59.2	59.2	60.37
62.2	61.4	61.2	61.1	60.6	60.3	60.0	59.6	59.2	59.2	59.0	58.5	58.2	58.0	60.27
57.4	57.5	58.1	57.8	57.6	57.4	57.2	56.7	56.3	56.0	55.7	55.5	55.0	54.4	56.86
59.2	59.4	59.4	59.0	58.9	58.9	58.7	57.8	57.4	56.2	55.4	55.2	55.0	54.6	57.05
55.2	54.6	54.2	53.4	53.2	53.0	53.0	52.8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	53.6	53.2	53.0	52.8	52.7	52.8	53.67
57.9	58.0	57.9	57.8	57.5	57.4	57.5	57.2	57.3	57.2	57.0	57.0	57.0	57.0	56.75
60.0	60.0	60.0	60.0	60.2	59.8	59.2	59.0	58.5	58.1	57.5	57.2	56.7	56.5	58.52
62.0	62.3	62.4	62.3	62.3	62.2	62.0	61.3	61.1	61.2	62.0	62.2	60.2	59.7	60.68
65.0	66.2	66.4	66.5	67.3	67.4	67.2	65.8	65.4	64.7	63.5	63.0	62.6	62.5	63.86
69.3	69.0	69.0	68.8	68.0	67.5	67.0	67.2	66.5	66.5	66.1	65.7	65.4	65.2	66.47
68.5	68.3	68.3	68.2	68.0	68.0	67.5	67.3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	63.3	63.3	63.3	63.2	63.4	63.5	66.13
64.8	65.0	65.0	65.0	65.0	64.6	64.4	64.0	63.5	63.0	62.5	62.5	62.3	62.1	63.80
62.4	62.6	62.4	62.3	62.0	61.5	60.8	60.7	60.6	60.4	60.5	60.5	60.3	60.4	61.48
66.3	67.3	67.6	67.6	67.3	66.8	66.7	66.5	66.3	66.5	64.8	64.5	64.0	63.5	64.53
68.5	68.8	68.8	68.8	68.1	67.6	67.2	66.6	66.4	66.0	65.5	65.0	64.5	64.4	66.00
67.3	67.6	67.7	67.5	68.5	69.0	68.5	67.4	67.0	66.1	65.5	64.6	64.0	63.5	66.29
67.0	67.4	67.5	67.5	67.4	67.3	67.0	66.6	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	65.9	65.5	65.5	65.0	64.8	64.5	65.67
69.4	69.5	69.9	69.9	70.1	70.0	69.6	69.0	68.5	68.3	68.0	67.0	66.5	65.8	67.86
68.5	67.5	66.8	66.4	66.5	66.4	66.0	65.2	63.8	62.1	61.2	60.6	60.0	59.5	65.53
60.5	60.7	30.6	60.4	61.0	60.5	60.3	61.5	61.5	60.0	59.2	59.0	58.5	58.0	60.11
63.05	63.16	63.13	62.96	62.89	62.73	62.44	62.10	61.46	61.02	60.67	60.38	60.06	59.74	61.48

VERTICAL FORCE.												
One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.												
Mean Galtin- gen Time.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	156'4	154'9	152'6	150'2	148'7	145'7	144'6	146'6	146'6	146'6	146'6	146'5
2	152'7	149'7	147'9	147'6	141'8	143'5	141'0	142'2	142'5	141'9	141'4	141'4
3	142'9	143'1	143'0	139'6	137'6	136'3	135'8	136'2	135'1	135'0	135'0	135'0
4	—	—	—	—	—	—	—	—	—	—	—	—
5	136'8	136'8	131'3	133'6	131'1	131'2	135'7	136'9	137'3	140'4	143'8	143'8
6	145'9	141'4	145'2	145'4	146'4	146'4	146'4	147'7	147'7	148'5	148'5	148'5
7	150'6	150'9	146'7	144'7	145'8	145'8	144'6	144'3	143'3	145'3	144'0	143'8
8	146'9	146'1	143'1	143'1	141'9	140'4	138'0	139'8	139'8	141'3	141'1	140'7
9	144'2	142'9	142'9	141'2	141'0	138'0	135'0	132'9	132'9	131'6	132'5	132'7
10	138'5	138'7	137'1	135'0	132'2	131'2	131'2	132'3	131'2	133'7	137'2	140'3
11	—	—	—	—	—	—	—	—	—	—	—	—
12	143'5	143'9	143'1	141'7	141'8	140'5	140'7	141'1	143'6	145'7	145'7	145'7
13	148'5	151'0	147'7	141'8	143'0	143'8	144'7	144'9	141'9	144'9	144'9	141'9
14	152'8	152'4	151'3	151'3	150'9	148'6	148'6	149'1	149'2	152'9	153'8	160'1
15	146'4	144'7	138'8	136'7	132'6	130'1	125'3	123'3	123'3	123'6	119'2	119'2
16	124'3	122'6	120'4	118'7	117'7	115'2	114'9	113'1	111'5	112'8	113'0	114'0
17	122'0	121'0	120'5	118'7	117'4	115'3	115'1	114'0	115'3	116'1	116'0	117'0
18	—	—	—	—	—	—	—	—	—	—	—	—
19	126'3	125'5	122'9	116'4	119'5	118'3	119'0	117'6	119'0	118'8	118'8	121'1
20	124'7	123'7	125'0	124'9	124'1	124'1	123'5	123'1	125'7	125'7	128'2	129'4
21	130'8	132'8	133'1	131'5	132'1	129'8	125'0	125'0	129'4	135'9	138'1	137'2
22	128'1	131'8	136'7	131'5	131'5	132'6	136'0	139'2	141'2	146'1	150'8	145'1
23	141'1	147'8	137'1	137'1	136'4	136'4	132'1	131'8	128'7	129'3	129'3	133'5
24	138'5	138'5	138'0	129'3	129'5	136'3	135'7	133'2	131'6	132'7	130'9	131'5
25	—	—	—	—	—	—	—	—	—	—	—	—
26	129'6	128'3	126'7	121'5	121'0	120'0	121'0	119'8	119'8	119'8	121'8	121'3
27	132'0	131'8	129'3	126'4	125'7	122'6	120'3	120'3	121'6	120'5	120'9	122'7
28	126'3	125'4	125'4	123'3	121'0	119'9	117'8	117'8	119'0	121'7	123'3	121'4
29	132'2	130'2	127'0	124'4	123'4	121'9	123'8	123'8	123'8	121'6	121'6	121'8
30	131'9	131'9	129'3	128'1	126'8	126'6	126'4	124'2	121'1	124'2	125'4	125'4
Hourly Means	138'28	138'11	136'35	131'22	133'35	132'44	131'62	131'45	132'12	132'95	133'53	134'13
TEMPERATURE OF THE VERTICAL FORCE MAGNET.												
	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
1	58'4	59'0	59'6	59'6	59'6	60'1	60'4	60'5	61'0	61'5	61'9	62'4
2	59'3	59'7	60'3	61'0	62'0	62'7	63'1	63'5	64'0	64'5	65'0	65'5
3	61'0	61'8	65'0	65'5	66'0	66'8	67'8	68'5	68'5	69'0	69'5	69'7
4	—	—	—	—	—	—	—	—	—	—	—	—
5	66'5	66'4	66'5	66'7	67'3	67'4	67'5	67'5	67'4	67'3	67'3	67'4
6	62'0	62'0	62'0	62'1	61'5	61'5	61'5	61'8	62'0	62'4	62'7	62'7
7	59'8	59'7	59'8	60'3	60'5	60'5	60'6	61'0	61'5	62'1	62'8	63'1
8	60'5	60'4	60'8	61'2	62'2	63'0	63'3	63'5	61'1	64'6	65'4	65'5
9	62'5	63'2	63'5	63'8	64'6	65'5	66'0	66'5	67'1	68'0	68'4	68'5
10	65'9	66'2	66'5	67'1	68'0	68'3	68'5	68'7	69'0	69'3	69'7	69'7
11	—	—	—	—	—	—	—	—	—	—	—	—
12	62'0	62'0	62'2	62'3	62'5	62'4	61'9	61'7	61'9	61'8	62'6	62'8
13	59'4	59'5	59'6	59'7	59'8	60'2	60'4	60'3	60'3	61'0	61'5	62'0
14	58'8	58'8	58'4	58'2	58'5	59'2	59'4	59'4	59'7	60'2	60'8	61'0
15	61'0	62'0	63'0	63'5	65'6	67'5	70'0	71'6	73'4	75'0	76'4	76'7
16	74'3	74'4	75'4	76'2	77'0	78'0	78'5	79'5	79'8	80'7	81'0	80'5
17	71'7	71'9	75'1	75'3	77'2	77'1	77'6	78'4	78'0	78'4	78'9	78'5
18	—	—	—	—	—	—	—	—	—	—	—	—
19	72'5	72'5	73'0	73'5	73'5	74'1	74'5	75'1	75'5	75'4	75'5	75'5
20	72'0	72'0	72'5	72'8	73'0	73'1	73'5	73'5	73'7	73'8	74'0	74'0
21	69'8	69'5	69'0	69'2	69'5	69'5	69'5	69'5	69'7	70'0	70'6	71'3
22	67'3	67'3	67'7	68'5	68'8	69'3	69'5	70'1	70'4	70'8	71'0	70'6
23	67'5	67'5	67'5	68'4	67'6	68'1	69'5	70'3	71'5	71'6	71'5	71'3
24	67'0	67'6	67'6	68'0	68'5	69'0	69'0	69'3	69'5	69'7	70'5	70'5
25	—	—	—	—	—	—	—	—	—	—	—	—
26	69'6	70'0	70'9	72'0	72'5	73'3	74'0	75'5	75'9	76'3	76'7	76'7
27	70'7	70'5	71'1	72'0	72'1	72'7	73'1	73'5	74'5	75'0	75'5	75'5
28	72'6	72'5	72'5	72'7	72'9	72'9	72'9	72'9	72'9	73'0	73'5	73'5
29	69'1	69'5	70'5	71'0	71'5	72'0	71'6	72'0	72'5	73'1	73'5	73'6
30	68'6	68'8	69'8	70'3	70'5	71'3	71'6	72'3	72'5	73'2	73'5	73'5
Hourly Means	65'99	66'18	66'53	66'96	67'41	67'92	68'28	68'71	69'09	69'53	69'99	70'08



VERTICAL FORCE.

One Scale Division = .000066 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

10°.		11°.		12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	21°.	22°.	23°.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
146'6	146'5	146'7	146'7	147'4	147'8	148'4	148'4	148'4	148'4	149'3	150'5	151'8	153'3	148'80	148'80	148'80
141'4	141'4	140'6	138'8	140'3	140'3	141'3	141'3	141'3	141'3	141'3	142'6	142'6	142'6	142'6	142'6	142'95
135'0	135'0	134'1	140'4	136'1	135'4	135'9	121'7	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
143'8	143'8	143'9	139'9	138'9	139'6	140'0	138'6	138'6	137'5	137'5	139'1	139'3	139'3	139'3	139'3	137'03
148'5	148'5	148'6	146'8	146'8	147'4	147'4	150'3	148'5	149'3	150'6	151'6	153'5	147'93	147'93	147'93	139'49
144'0	143'8	143'6	143'7	141'6	145'7	147'2	146'5	148'7	149'6	150'5	150'5	151'5	146'52	146'52	146'52	148'0
141'1	140'7	140'7	141'5	140'0	141'3	138'4	139'2	140'2	142'4	144'1	144'7	144'9	141'60	141'60	141'60	148'91
132'5	132'7	132'8	133'6	134'1	134'1	134'3	136'3	137'0	137'0	137'9	136'3	136'3	136'3	136'3	136'3	136'41
137'2	140'3	140'3	136'0	136'0	136'0	136'3	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
145'7	145'7	145'8	145'7	145'8	146'5	146'5	146'8	149'3	150'5	150'5	150'5	152'0	145'53	145'53	145'53	148'91
144'9	144'9	145'4	145'4	145'6	145'6	146'0	142'5	139'4	147'1	149'2	150'7	150'7	145'88	145'88	145'88	148'91
153'8	160'4	149'0	147'2	145'8	144'4	145'7	144'3	141'4	141'4	140'9	149'5	149'7	125'22	125'22	125'22	148'91
119'2	119'2	118'8	118'7	118'1	118'1	119'5	119'5	120'8	120'8	120'8	125'0	123'3	125'22	125'22	125'22	148'91
113'0	114'0	113'0	111'8	113'4	113'6	113'8	116'0	117'3	117'8	118'5	119'7	120'7	120'7	120'7	120'7	148'91
116'0	117'0	117'0	121'8	122'0	122'0	122'0	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
118'8	121'1	121'1	126'5	123'3	123'2	124'6	124'6	124'0	123'0	122'4	122'1	120'9	119'7	119'7	119'7	119'45
128'2	129'4	131'7	131'5	124'9	128'9	128'6	130'3	130'3	130'6	130'3	130'3	132'7	134'1	127'72	127'72	127'72
138'1	137'2	130'7	132'1	133'2	131'5	127'4	127'9	119'8	124'0	123'6	114'8	105'4	111'7	127'63	127'63	127'63
150'8	145'1	142'0	141'3	134'6	133'5	130'8	130'0	130'0	124'3	117'5	127'8	131'6	141'1	145'18	145'18	145'18
129'3	133'5	133'5	133'7	133'7	131'8	131'8	132'3	132'3	125'6	126'5	131'4	133'9	133'9	133'50	133'50	133'50
130'9	131'5	132'2	132'2	134'3	131'6	129'3	129'3	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
121'8	121'3	121'3	123'0	122'1	122'0	123'0	123'3	123'5	124'8	124'4	121'4	128'5	128'8	123'27	123'27	123'27
120'9	122'7	122'7	123'2	122'6	122'6	122'0	122'6	122'6	124'8	123'8	121'1	126'8	126'3	124'05	124'05	124'05
123'3	124'4	121'4	124'0	124'3	125'9	127'8	127'8	127'8	124'0	125'3	128'4	130'1	131'8	124'45	124'45	124'45
121'6	121'8	121'8	122'0	121'5	123'9	123'9	124'8	125'5	123'5	119'7	121'1	125'5	125'4	123'92	123'92	123'92
125'4	125'4	123'5	123'5	127'5	123'4	124'0	123'4	123'4	123'8	123'8	121'4	122'1	123'7	125'32	125'32	125'32
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
133'54	134'13	133'46	133'60	132'96	132'73	132'78	132'51	132'98	132'47	132'69	133'60	135'28	136'27	133'74	133'74	133'74

TEMPERATURE OF THE VERTICAL FORCE MAGNET.

61'9	62'4	62'5	62'5	62'4	62'2	61'9	61'5	61'2	61'0	60'4	60'0	59'8	58'8	60'76
65'0	65'5	65'6	65'6	65'7	65'2	65'2	65'3	65'1	65'0	64'7	64'6	64'5	64'2	63'80
69'5	69'7	69'6	68'9	68'7	68'5	68'5	68'3	—	—	—	—	—	—	67'25
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
67'3	67'4	66'7	66'4	66'0	65'8	65'5	64'8	63'7	63'1	62'5	62'0	61'7	61'7	65'85
62'7	62'7	62'2	62'3	62'1	62'0	61'8	61'6	60'5	60'3	60'0	59'5	59'0	61'58	61'58
62'8	63'1	63'3	63'0	62'7	62'5	62'0	61'4	60'5	60'2	60'0	59'6	59'4	61'05	61'05
65'4	65'5	65'5	65'5	65'1	64'7	64'5	64'5	64'1	63'6	63'4	62'9	62'6	62'4	63'47
68'4	68'5	68'7	68'7	68'6	68'5	68'0	67'6	67'4	67'2	66'7	66'2	66'0	66'0	66'55
69'7	69'7	69'9	69'7	69'6	69'2	68'6	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
62'6	62'8	62'9	63'0	61'5	61'2	60'5	60'2	60'0	60'0	59'6	59'2	59'0	58'8	61'44
61'5	62'0	62'3	61'6	61'5	61'4	61'0	60'6	60'3	60'1	59'7	59'4	59'1	60'53	60'53
60'8	61'0	61'5	62'0	62'4	61'7	61'5	61'5	61'5	60'9	60'4	60'1	60'3	60'32	60'32
76'4	76'7	77'3	77'5	77'5	77'0	76'6	75'7	75'0	74'7	74'6	74'4	74'0	74'0	72'26
81'0	80'5	80'8	81'0	81'0	79'8	79'3	78'6	77'7	77'5	77'1	76'6	76'1	75'3	78'17
78'9	78'5	78'3	77'5	76'0	76'5	76'5	76'4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75'5	75'5	74'7	74'7	74'5	74'3	73'7	73'5	73'3	73'0	73'0	73'5	73'0	73'0	76'22
74'0	74'0	73'4	73'0	72'5	72'1	71'6	71'3	70'9	70'0	69'6	69'2	69'0	69'5	71'00
70'6	71'3	71'3	71'3	70'5	70'8	70'8	70'5	70'5	70'0	69'5	69'4	68'3	70'02	70'02
71'0	70'6	70'2	70'5	70'0	69'8	69'6	69'5	69'1	69'0	68'5	68'5	68'2	69'31	69'31
71'5	71'3	71'1	70'8	70'5	70'2	69'7	69'5	68'7	68'2	67'9	67'5	67'2	69'35	69'35
70'5	70'5	70'6	70'5	69'6	69'8	70'0	69'4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
76'7	76'7	76'0	75'6	75'0	74'3	73'7	73'3	73'0	72'7	72'5	70'5	70'4	69'67	69'67
75'5	75'5	74'8	74'8	75'0	75'0	74'6	74'4	73'7	73'4	72'7	72'7	73'0	73'55	73'55
73'5	73'5	73'2	73'0	72'5	72'3	71'6	71'3	71'5	71'0	70'6	70'0	69'3	72'25	72'25
73'5	73'6	73'5	73'5	73'3	73'3	72'6	72'3	71'5	71'1	70'8	70'5	69'6	71'72	71'72
73'5	73'5	74'0	74'0	73'5	73'7	73'8	73'6	73'5	73'3	72'7	72'5	72'0	72'23	72'23
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
69'99	70'08	70'05	69'93	69'65	69'44	69'15	68'77	68'25	67'89	67'53	67'15	66'83	66'51	68'24

January 21st and 22nd.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0°721.										DECLINATION.	
		10%.	11%.	12%.	13%.	14%.	15%.	16%.	17%.	18%.	19%.	20%.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	113°0	114°4	114°2	115°8	116°2	115°8	117°8	113°8	115°0	115°7	116°2	
5	0	113°0	114°1	114°8	116°0	116°2	115°9	116°0	114°0	115°2	115°7	116°3	
10	0	113°1	114°2	114°8	116°0	116°1	116°0	115°3	114°0	115°0	115°6	116°3	
15	0	113°3	114°3	115°0	116°0	116°1	116°3	114°2	114°0	115°0	115°6	116°4	
20	0	113°7	114°2	115°1	116°2	116°1	118°0	114°2	114°0	115°2	116°0	116°4	
25	0	113°8	114°2	115°0	116°0	116°0	120°0	114°0	114°2	115°2	116°0	116°2	
30	0	114°0	114°1	115°0	116°1	116°0	121°2	114°2	114°2	115°2	115°9	116°2	
35	0	113°9	114°7	115°0	116°5	116°0	122°2	113°8	114°4	115°2	116°0	116°2	
40	0	113°8	114°8	115°0	116°9	116°0	122°0	113°5	114°4	115°2	116°1	116°0	
45	0	113°9	114°5	115°0	116°7	116°1	121°0	111°0	114°2	115°3	116°2	115°8	
50	0	114°0	114°1	115°0	116°5	116°0	120°2	113°8	114°5	115°5	116°2	115°8	
55	0	114°1	114°2	115°3	116°3	115°8	118°8	114°0	114°7	115°4	116°2	116°0	

M.		One Scale Division = '000087 parts of the H. F.										HORIZONTAL FORCE.	
		10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	
2	0	625°0	621°3	622°0	621°0	620°0	618°0	621°2	621°2	620°7	620°4	620°8	
7	0	625°3	621°8	622°2	620°5	620°0	618°0	620°0	619°4	620°6	620°4	621°0	
12	0	625°1	622°0	621°0	620°0	620°0	617°0	620°0	619°8	620°2	620°6	621°0	
17	0	625°0	622°0	621°4	620°0	620°0	616°0	619°2	619°7	620°6	620°8	620°8	
22	0	625°0	621°8	622°0	620°0	619°0	614°0	617°4	620°0	620°5	620°6	621°8	
27	0	625°0	621°8	622°0	620°0	619°0	614°0	618°2	620°2	620°8	620°9	622°1	
32	0	624°2	621°8	622°0	619°0	619°0	614°5	618°2	620°0	620°4	620°4	622°8	
37	0	624°2	621°5	622°0	619°0	618°8	615°5	619°4	620°2	620°0	620°0	620°5	
42	0	624°0	622°0	622°0	620°0	619°0	617°0	619°2	620°4	620°4	620°6	621°5	
47	0	623°2	622°0	622°0	620°0	619°0	618°6	619°0	620°0	620°6	620°6	622°8	
52	0	623°0	622°2	621°0	620°0	619°0	622°0	620°0	621°2	620°4	620°4	623°4	
57	0	622°1	622°2	620°6	620°0	618°0	622°0	621°4	620°8	620°6	620°4	622°7	

Thermometer		43°8	43°9	44°2	45°0	45°0	44°5	43°5	42°0	41°6	41°3	39°6	
M.	S.	One Scale Division = '000063 parts of the V. F.										VERTICAL FORCE.	
3	0	176°5	175°9	171°9	170°1	173°2	171°9	172°9	171°2	171°5	175°5	178°0	
8	0	176°5	175°7	171°9	170°1	173°8	171°9	173°1	174°2	174°5	175°3	178°0	
13	0	176°5	175°7	171°4	170°5	173°8	171°9	173°6	174°2	174°5	176°8	177°8	
18	0	176°5	175°7	171°4	171°1	173°8	172°0	173°6	174°0	174°5	176°8	177°8	
23	0	176°5	174°9	171°4	171°1	173°8	172°0	173°6	174°4	174°5	176°8	177°8	
28	0	176°5	174°9	171°4	171°8	173°0	172°0	173°8	174°1	174°3	177°8	177°8	
33	0	176°5	174°9	171°4	171°8	172°6	172°0	173°6	174°1	174°3	177°9	177°8	
38	0	176°5	173°1	171°1	171°8	172°6	172°0	173°9	174°1	174°3	178°0	178°0	
43	0	176°5	173°1	171°1	171°8	172°6	172°0	173°8	174°6	175°2	178°0	178°3	
48	0	176°5	173°1	171°1	172°5	172°6	172°6	173°6	174°4	175°2	178°0	178°3	
53	0	176°5	172°5	170°6	172°5	172°6	172°6	173°6	174°4	175°4	178°0	178°3	
58	0	176°5	172°5	170°6	172°5	171°9	172°9	174°3	174°4	175°4	178°0	178°3	

Thermometer		42°6	42°8	44°6	45°6	44°6	41°8	41°1	42°8	41°8	41°2	40°2
Increasing Numbers denote decreasing Declination.												

METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.				
				Dry.	Wet.	Direction.	Force.					
D.	H.	M.	In.	°	°							
21	10	0	29°545	25°6	24°9	N. by W.	Light.	Clear; cir.-cum. and haze.				
	11	0	29°551	25°5	24°2	N. by W.	Moderate.	Clear; cir.-cum. and haze.				
	12	0	29°598	21°2	22°6	N. by W.	Light.	Clear; cir.-cum. and haze.				
	13	0	29°616	23°0	21°1	N.	Light.	Cloudy; cir.-cum.				
	14	0	29°653	20°6	18°9	N.	Fresh.	Cloudy, with haze.				
	15	0	29°690	17°1	16°9	N. by W.	Brisk, with gusts.	Clear; cir.-cum.				
	16	0	29°712	15°5	13°4	N. by W.	Fresh.	Clear; cir.-cum.				
	17	0	29°755	11°6	11°8	N.N.W.	Brisk, with gusts.	Clear; cir.-cum.				
	18	0	29°812	8°8	9°2	N.N.W.	Brisk.	Cloudy, with haze.				
	19	0	29°839	6°0	6°5	N. by W.	Brisk, with gusts.	Cloudy, with haze.				
	20	0	29°928	3°3	3°8	N.	Moderate, with gusts.	Cloudy; cum. and cir.				
	21	0	29°967	1°2	1°1	N.N.W.	Brisk, with gusts.	Cloudy, with haze.				

\* At 22° 10', Thermometer of H. F., 39° 5'; of V. F., 39° 0.

MAGNETICAL OBSERVATIONS.												
January 21st and 22nd.												
DECLINATION.						Angular Value of one Scale Division = 0''721.						
21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
115°7	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	108°0	110°4
115°7	116°3	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	108°2	110°8
115°6	116°3	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	108°7	111°0
115°6	116°4	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	108°9	111°2
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	109°0	111°7
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	109°1	111°8
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	109°3	112°9
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	109°5	112°1
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	109°8	112°2
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	110°0	112°3
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	110°2	112°9
116°0	116°2	117°0	118°3	119°6	120°2	120°8	119°1	116°2	112°7	108°8	110°3	113°0

HORIZONTAL FORCE.												
Increase in Scale Divisions, corresponding to 1° decrease of temperature, 1°63.												
620°4	620°8	621°1	621°9	621°3	621°0	618°5	613°1	608°2	608°4	616°0	621°8	634°5
620°4	621°0	621°4	621°0	621°0	623°2	616°2	613°5	607°2	609°2	616°8	625°8	636°0
620°6	621°0	621°4	621°7	625°0	623°2	617°5	612°0	607°6	610°0	617°0	625°9	635°1
620°8	621°8	621°6	625°2	625°0	623°0	616°5	611°5	607°4	609°7	618°7	626°7	635°0
620°6	621°8	621°6	625°2	625°0	623°0	617°5	611°4	607°0	610°3	619°7	627°9	635°4
620°9	622°1	622°5	625°2	625°0	621°1	615°5	610°9	607°2	610°3	620°1	628°5	636°3
620°4	622°8	622°4	625°7	625°0	621°0	616°0	610°7	606°5	611°0	621°2	630°0	637°2
620°0	620°5	622°2	623°4	625°7	625°5	625°0	620°0	611°5	610°3	607°0	615°1	621°2
620°6	621°5	622°1	623°6	625°8	626°0	621°8	620°8	615°0	608°5	606°7	614°0	621°9
620°6	621°8	621°1	623°8	626°1	626°0	621°8	620°0	611°5	609°5	607°2	613°2	622°0
620°4	623°4	623°0	623°3	625°7	621°8	620°0	613°9	608°4	608°0	611°5	622°8	632°8
620°4	622°7	623°1	623°5	624°9	625°5	621°5	618°5	613°0	608°5	608°2	615°6	623°1
620°4	622°7	623°1	623°5	624°9	625°5	621°5	618°5	613°0	608°5	608°2	615°6	623°1

VERTICAL FORCE.												
Increase in Scale Divisions, corresponding to 1° decrease of temperature, 1°80.												
179°1	180°2	180°5	181°7	180°2	183°0	182°3	182°8	181°6	187°5	188°1	187°2	186°2
179°1	179°9	180°8	181°7	180°2	183°7	182°3	182°8	184°6	187°5	187°4	187°3	186°0
179°1	179°9	181°2	180°9	180°3	183°7	182°3	182°8	184°8	187°5	187°4	187°0	185°8
180°1	180°2	181°2	180°9	180°3	183°2	182°3	182°8	185°3	187°6	188°1	187°0	185°5
180°4	180°2	181°2	180°9	180°3	183°2	182°3	183°4	185°3	187°6	188°1	187°7	185°5
180°4	179°9	181°2	180°9	180°3	182°8	182°3	183°1	185°4	187°6	187°7	186°0	185°5
180°4	180°5	181°2	180°7	180°7	182°8	182°3	183°8	185°4	187°6	188°1	186°5	185°5
180°4	180°5	181°2	180°7	180°7	182°3	182°3	183°8	185°8	187°6	187°0	186°2	185°4
179°3	179°9	181°0	180°9	181°2	182°3	182°3	183°8	185°8	186°5	187°0	186°1	185°1
179°3	179°9	181°0	180°4	183°2	182°3	182°3	183°9	187°2	187°1	187°0	186°0	184°9
178°6	179°9	181°7	180°4	182°2	182°3	182°8	183°9	186°8	187°3	187°4	186°0	184°7
178°6	180°5	181°7	180°3	182°2	182°3	182°8	184°6	187°0	188°1	186°3	186°2	184°7

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.												
Mean Gettingen Time.	Barometer at 32°.	Thermometers.			Wind.			Weather.				
		Dry.	Wet		Direction.	Force.						
			°	°								
21 22 0	29°993	1°0	0°6	N.	Moderate, with gusts.	Cloudy, with haze.						
23 0	30°039	-1°2	-0°7	N.N.W.	Moderate.	Clear, with haze.						
22 0 0	30°078	-0°7	-1°1	N.N.W.	Moderate.	Clear, with cum.						
1 0	30°120	-1°4	-1°9	N.N.W.	Moderate, with gusts.	Clear; cir-cum and haze.						
2 0	30°141	0°0	-1°1	N.N.W.	—	Clear; cir-cum.						
3 0	30°154	2°7	2°8	N.N.W.	—	Clear; cum-strat.						
4 0	30°161	6°4	5°7	N.N.W.	Brisk, with gusts.	Clear; cir-cum.						
5 0	30°167	9°5	9°1	N.N.W.	Brisk, with gusts.	Cloudy, with haze.						
6 0	30°157	12°4	12°4	N.W. by N.	Brisk, with gusts.	Cloudy, with haze.						
7 0	30°135	16°6	15°8	N.W. by N.	Brisk, with gusts.	Clear; cir-cum.						
8 0	30°147	18°8	16°2	N.N.W.	Moderate, with gusts.	Clear; cir-cum.						
9 0	30°184	18°9	16°7	N.W.	Brisk.	Clear; cir-cum. and haze.						

February 27th and 28th. MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.		Angular Value of one Scale Division = 0".721.										
		DECLINATION.										
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	110°8	112°8	113°0	113°4	117°4	113°8	111°0	114°4	113°7	112°4	112°0
5	0	111°0	112°6	113°0	113°8	117°0	113°8	114°0	114°9	114°6	112°9	112°0
10	0	111°0	112°8	113°2	114°0	116°6	113°8	114°2	115°4	114°8	113°0	112°4
15	0	111°0	113°0	113°4	115°0	115°0	114°0	115°0	115°8	114°0	113°9	112°4
20	0	111°2	113°0	113°7	114°8	113°4	113°5	115°3	116°1	114°0	114°2	113°1
25	0	111°2	113°2	113°8	114°4	115°2	114°2	115°2	116°1	114°0	113°0	113°2
30	0	111°2	112°8	114°0	114°6	115°4	113°8	116°9	115°7	114°0	112°2	114°3
35	0	111°7	113°0	113°8	114°4	115°0	113°4	115°8	115°9	113°7	112°2	114°8
40	0	111°8	113°2	113°7	114°4	115°6	113°6	115°0	116°0	113°0	111°9	114°7
45	0	112°2	113°4	113°2	118°6	115°4	113°8	114°2	115°8	111°0	111°5	114°7
50	0	112°3	113°8	114°0	122°0	115°0	113°4	114°3	114°2	110°8	111°5	114°5
55	0	112°8	113°4	114°2	119°9	114°0	113°9	114°3	113°1	111°2	111°8	114°8

		One Scale Division = '000087 parts of the H. E.										
		HORIZONTAL FORCE.										
M.	S.	622°0	623°2	623°0	623°4	624°2	625°4	619°8	619°6	618°4	622°4	622°1
2	0	622°0	623°2	623°0	623°4	624°2	625°4	619°8	619°6	618°4	622°4	622°1
7	0	622°4	623°4	623°2	624°2	625°0	625°0	620°4	619°0	619°0	622°2	622°8
12	0	622°0	623°0	623°4	623°4	626°0	624°0	620°3	618°4	619°8	623°0	622°8
17	0	623°2	622°6	623°4	622°6	625°8	625°4	620°6	618°2	621°0	623°0	623°0
22	0	623°6	623°0	623°6	622°6	625°4	625°2	620°1	618°0	621°8	623°0	623°0
27	0	622°2	622°8	623°8	622°5	623°8	623°8	619°0	618°8	621°3	622°7	623°2
32	0	621°8	623°0	624°0	624°0	621°2	623°0	619°9	617°0	621°5	622°9	623°0
37	0	622°0	623°2	621°0	623°2	624°2	622°2	620°8	616°4	622°4	621°9	623°0
42	0	621°2	623°2	621°8	623°2	625°8	621°4	620°6	617°4	622°1	621°2	622°0
47	0	621°2	621°0	622°0	625°0	626°0	620°8	621°0	618°8	621°4	621°9	621°8
52	0	622°0	623°8	621°0	627°4	625°8	620°2	620°0	618°6	621°0	622°0	621°0
57	0	621°8	623°8	625°2	627°2	625°2	619°0	619°0	618°7	621°2	622°2	621°0

Thermometer		38°8	38°2	37°8	38°8	40°0	40°2	40°0	40°1	40°1	39°8	38°9
Thermometer		38°8	38°2	37°8	38°8	40°0	40°2	40°0	40°1	40°1	39°8	38°9

		One Scale Division = '000063 parts of the V. E.										
		VERTICAL FORCE.										
M.	S.	185°9	185°2	185°0	182°7	180°5	179°7	181°4	180°5	180°3	179°4	179°0
3	0	185°9	185°2	185°0	182°7	180°5	179°7	181°4	180°5	180°3	179°4	179°0
8	0	185°9	185°3	183°9	182°7	180°5	179°7	181°4	179°7	181°3	179°4	178°9
13	0	186°0	185°1	183°9	182°7	180°5	179°7	180°9	179°7	181°1	179°3	178°9
18	0	185°6	185°0	183°7	182°7	180°5	179°7	181°6	180°3	180°9	179°3	178°9
23	0	185°7	184°9	183°6	182°2	180°5	179°7	181°3	180°3	180°8	178°8	178°9
28	0	185°6	185°0	181°6	182°2	180°5	179°7	180°7	180°5	180°8	178°6	178°9
33	0	185°5	185°0	183°6	182°2	180°5	179°9	181°5	180°3	180°4	178°7	179°0
38	0	185°3	185°0	182°8	181°9	180°7	179°4	181°5	179°4	180°0	178°9	179°0
43	0	185°5	185°0	182°7	181°9	180°7	180°1	180°3	179°7	180°4	178°9	179°4
48	0	185°0	185°0	182°7	181°9	180°4	180°2	180°3	180°8	179°8	179°1	179°5
53	0	185°0	185°0	182°7	181°9	180°4	180°4	180°5	180°8	179°8	179°1	179°7
58	0	185°0	185°0	182°7	181°4	180°4	180°4	180°5	180°3	179°4	179°1	179°7

Thermometer		38°3	38°1	38°3	39°0	40°0	40°0	40°0	40°2	40°3	40°4	40°0
Thermometer		38°3	38°1	38°3	39°0	40°0	40°0	40°0	40°2	40°3	40°4	40°0

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
27	10	0	30°009	14°5	13°7	S.W.	Very light.	Cloudy; cir-cum. and haze.			
	11	0	30°008	13°0	11°8	S.W.	Very light.	Cloudy; cir-cum. and haze.			
	12	0	29°997	11°8	11°7	S.W.	Very light.	Cloudy; slight snow.			
	13	0	29°971	11°1	12°0	N.W.	Very light.	Cloudy; cir-cum.			
	14	0	29°909	11°1	10°7	N. by W.	Very light.	Cloudy; with haze.			
	15	0	29°903	11°0	10°7	N. by W.	Very light.	Cloudy; cir-cum. and haze.			
	16	0	29°883	10°7	10°2	N.N.E.	Very light.	Cloudy; haze and snow.			
	17	0	29°851	10°5	10°5	N.N.E.	Very light.	Cloudy; cir-cum.			
	18	0	29°827	10°7	10°5	N.E. by N.	Very light.	Hazy; occasional snow.			
	19	0	29°801	11°0	10°5	N.N.E.	Very light.	Hazy; occasional snow.			
	20	0	29°789	11°1	10°8	N.N.E.	Light.	Hazy; cir-cum.			
	21	0	29°785	11°0	10°8	N.N.E.	Moderate.	Hazy; cir-cum. and haze.			

\* At 28° 10', Thermometer of H. E., 41° 41' of V. E., 40° '8.

MAGNETICAL OBSERVATIONS.

February 27th and 28th.

DECLINATION.

Angular Value of one Scale Division = 0'' 721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div. 115'4	Sc. Div. 114'2	Sc. Div. 116'0	Sc. Div. 116'6	Sc. Div. 119'0	Sc. Div. 121'0	Sc. Div. 120'6	Sc. Div. 117'2	Sc. Div. 111'2	Sc. Div. 108'0	Sc. Div. 107'0	Sc. Div. 107'5	Sc. Div. 109'3
112'4	114'6	115'5	116'6	119'0	121'0	120'2	117'0	111'0	108'0	107'0	107'8	109'7
112'9	114'7	115'9	117'0	119'2	121'0	120'0	116'8	110'9	108'1	107'4	108'0	109'8
113'0	114'8	116'0	117'0	119'3	120'8	120'0	116'4	110'3	107'9	107'1	107'9	110'0
113'9	114'2	115'6	117'0	119'7	120'6	119'8	116'2	109'8	108'0	106'9	108'2	110'0
114'2	114'8	116'0	117'1	119'2	121'0	119'8	115'9	110'0	107'4	107'0	108'6	110'5
113'8	115'0	115'9	117'8	119'8	121'2	119'8	115'4	110'0	107'7	107'0	108'8	111'0
113'6	115'0	115'9	118'0	119'7	121'0	119'2	114'2	109'2	108'0	107'1	108'3	111'0
113'4	115'0	116'0	118'3	120'0	121'0	119'2	114'1	108'4	107'3	107'2	108'7	111'0
112'2	114'8	116'0	118'8	120'2	121'0	119'2	113'5	108'0	107'0	107'2	109'0	111'1
112'2	114'8	116'0	118'8	120'4	121'0	118'6	113'0	108'0	107'2	107'2	109'0	111'8
111'9	114'7	116'0	119'0	121'0	120'6	117'6	112'0	107'8	107'1	107'3	109'2	112'0

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

622'4	621'3	622'0	622'1	620'0	616'6	613'2	608'1	601'8	606'3	610'0	613'8	618'0
622'2	621'0	622'0	623'0	620'0	616'4	612'2	607'6	603'0	606'1	610'8	611'0	618'0
621'4	621'0	621'2	623'0	619'6	616'1	612'0	607'1	605'0	607'0	610'6	611'4	617'0
623'0	621'5	621'6	623'0	619'4	616'6	611'2	607'0	606'0	608'1	610'2	612'0	617'5
623'0	622'0	622'2	623'0	620'3	616'3	610'4	606'1	605'8	608'0	610'0	613'0	617'0
622'7	622'0	622'0	623'0	620'6	615'6	610'8	605'0	604'6	607'8	611'9	613'6	616'8
622'9	622'0	622'5	622'0	619'1	615'0	610'2	605'1	604'6	609'0	611'8	615'0	617'0
620'8	621'2	622'2	622'0	619'6	615'2	610'9	605'0	605'0	608'4	612'0	617'2	617'0
620'9	622'0	622'8	622'0	618'8	614'4	609'8	604'0	603'7	608'8	612'0	617'0	617'0
620'1	621'4	622'2	622'0	618'0	614'3	609'8	604'3	607'0	608'2	613'7	617'0	617'5
620'1	622'0	622'0	621'0	618'2	613'8	608'8	604'2	606'4	609'2	613'6	617'0	617'0
621'0	622'0	622'0	621'0	616'4	613'1	608'3	604'0	606'6	609'6	613'1	618'0	617'0
39'8	38'9											

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 80.

179'7	181'5	182'1	183'0	181'7	185'2	185'6	185'2	181'7	183'7	183'3	182'4	182'7
179'7	181'7	182'1	183'0	181'7	185'1	185'2	185'5	181'3	183'7	183'0	182'7	182'7
179'3	181'4	182'1	183'0	181'8	184'9	185'4	184'9	181'3	183'7	183'0	182'7	182'7
179'3	181'4	182'1	183'0	181'8	185'2	185'4	184'9	181'5	183'7	183'0	182'2	182'7
178'8	181'4	182'1	183'6	181'8	185'1	185'4	184'6	181'8	183'7	183'0	182'2	182'3
178'6	181'6	182'1	183'6	181'7	185'5	185'1	184'4	181'5	183'5	183'0	182'2	182'3
178'7	181'4	182'1	183'6	181'7	185'6	185'5	185'0	181'5	183'5	183'0	182'2	182'3
178'9	181'4	182'1	183'6	181'9	185'5	185'5	185'0	181'7	183'4	182'8	182'2	182'3
179'1	181'3	182'1	183'6	181'9	185'6	184'9	184'5	181'3	183'5	182'8	182'2	182'3
179'1	181'3	182'5	183'6	181'9	185'6	184'9	184'2	181'3	183'5	182'8	182'6	182'3
179'1	181'3	182'5	183'6	185'0	185'6	185'0	184'6	181'3	183'3	182'8	182'5	182'3
180'6	181'3	182'5	184'7	185'2	185'6	185'2	184'5	181'0	183'3	182'4	182'5	182'3
40'4	40'0	40'0	40'0	39'5	38'4	38'3	38'5	39'4	40'0	40'0	40'1	40'6

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.	°	°			
27 22 0	29'757	11'8	11'0	N.E. by N.	Moderate.	Cloudy, with haze.
23 0 0	29'731	11'6	10'5	N.E.	Moderate.	Cloudy, with occasional snow.
28 0 0	29'727	11'3	10'5	N.E.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.
1 0 0	29'727	11'8	10'8	N.E. by N.	Moderate.	Cloudy; cir.-cum.
2 0 0	29'740	12'1	11'4	N.E. by N.	Moderate.	Cloudy; cir.-cum.
3 0 0	29'720	14'9	14'1	N.E.	Moderate, with gusts.	Fair, with cir.
4 0 0	29'721	16'7	15'8	N.E. by E.	Moderate, with gusts.	Fair, with cir.
5 0 0	29'714	18'3	17'3	N.E.	Moderate.	Fair, with cir. and cum.
6 0 0	29'708	18'5	17'5	N.E.	Moderate, with gusts.	Cloudy, with cum.
7 0 0	29'695	17'7	17'1	N.E. by E.	Moderate, with gusts.	Cloudy; cir.-cum.
8 0 0	29'692	18'1	17'0	E.N.E.	Moderate, with gusts.	Cloudy; occasional s.w.
9 0 0	29'694	19'4	17'5	E.N.E.	Moderate.	Cloudy; cir.-cum. and haze.

March 18th and 19th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	108° 9	111° 2	112° 2	120° 6	110° 1	112° 8	113° 0	113° 2	113° 9	114° 0	114° 0	114° 0
5	0	109° 0	111° 4	112° 4	124° 0	110° 8	112° 9	113° 0	113° 2	114° 0	113° 9	114° 2	114° 2
10	0	109° 8	111° 8	113° 8	120° 3	111° 2	113° 0	113° 0	113° 5	114° 0	114° 9	114° 6	114° 6
15	0	110° 2	112° 0	118° 8	116° 8	111° 6	113° 0	113° 0	113° 9	114° 0	114° 1	115° 1	114° 4
20	0	111° 6	112° 0	125° 4	115° 0	112° 0	112° 9	113° 1	113° 8	114° 0	114° 1	114° 1	114° 1
25	0	111° 0	112° 0	125° 6	114° 6	112° 0	112° 9	113° 1	113° 8	114° 0	114° 2	113° 1	115° 1
30	0	110° 4	112° 0	124° 8	113° 7	112° 2	112° 8	113° 1	113° 8	114° 0	114° 3	113° 2	114° 1
35	0	110° 8	111° 6	126° 4	112° 0	112° 1	113° 0	113° 2	113° 7	114° 0	114° 3	113° 9	114° 5
40	0	111° 4	111° 4	128° 6	111° 2	112° 3	113° 0	113° 2	113° 5	114° 0	114° 5	114° 1	114° 1
45	0	111° 0	112° 2	128° 8	110° 7	112° 2	113° 0	113° 2	113° 9	114° 0	114° 3	114° 6	114° 5
50	0	111° 2	112° 0	128° 9	110° 2	112° 7	113° 2	113° 2	113° 8	114° 0	113° 3	115° 3	115° 3
55	0	111° 2	112° 6	128° 6	110° 2	112° 6	113° 0	113° 4	113° 8	114° 0	113° 8	115° 3	114° 4
		One Scale Division = '000087 parts of the H.F.						HORIZONTAL FORCE.					
M.	S.	600° 9	607° 0	600° 8	595° 0	602° 8	603° 4	603° 5	601° 8	602° 0	602° 0	600° 0	600° 0
2	0	601° 8	607° 2	599° 6	595° 0	603° 0	603° 0	603° 0	602° 0	602° 0	602° 0	601° 5	600° 0
7	0	601° 6	608° 8	600° 0	594° 2	602° 8	603° 7	602° 9	602° 0	602° 0	601° 5	601° 2	600° 0
12	0	603° 2	607° 2	597° 6	593° 1	602° 4	604° 0	603° 0	602° 2	602° 2	601° 0	601° 2	600° 0
17	0	606° 6	606° 8	597° 6	593° 0	602° 4	603° 8	602° 8	602° 7	601° 4	601° 0	601° 0	601° 0
22	0	607° 0	607° 5	597° 8	595° 6	603° 0	603° 4	602° 4	602° 7	601° 4	601° 0	601° 2	601° 0
27	6	605° 4	606° 8	595° 2	597° 2	603° 0	603° 0	602° 5	601° 8	601° 2	601° 2	601° 0	601° 0
32	0	607° 0	606° 8	590° 7	599° 6	603° 0	603° 0	602° 0	602° 0	601° 0	601° 0	602° 0	600° 0
37	0	607° 4	603° 8	592° 0	601° 8	603° 6	603° 2	602° 0	601° 4	600° 9	602° 0	602° 0	600° 0
42	0	606° 8	602° 7	593° 0	602° 0	603° 0	603° 2	602° 1	601° 4	600° 8	601° 0	602° 0	600° 0
47	0	607° 2	601° 8	592° 8	601° 9	603° 2	603° 4	602° 0	601° 6	600° 8	601° 0	602° 0	601° 0
52	0	605° 4	602° 0	594° 2	603° 0	603° 4	601° 0	602° 0	601° 6	601° 8	601° 2	601° 0	600° 0
Thermometer		52° 4	52° 2	52° 0	52° 7	53° 0	53° 3	53° 9	54° 0	54° 0	53° 6	53° 5	53° 5
		One Scale Division = '00006.						VERTICAL FORCE.					
M.	S.	163° 4	161° 4	164° 7	161° 2	156° 5	155° 9	156° 2	156° 2	156° 2	153° 8	154° 4	156° 3
3	0	164° 2	164° 6	165° 1	159° 1	156° 5	156° 4	158° 1	156° 2	156° 2	154° 7	154° 4	156° 3
8	0	164° 2	164° 6	165° 1	158° 1	156° 0	156° 2	158° 8	155° 1	156° 2	153° 7	154° 4	156° 3
13	0	164° 2	164° 7	165° 5	158° 3	156° 0	155° 6	155° 8	155° 1	156° 3	153° 7	154° 4	156° 3
18	0	164° 3	164° 7	164° 2	158° 7	156° 0	155° 6	155° 8	155° 1	156° 3	153° 9	154° 4	156° 3
23	0	164° 8	161° 7	164° 2	158° 6	156° 4	155° 6	156° 9	155° 1	154° 4	153° 9	154° 4	156° 3
28	0	164° 8	161° 7	163° 3	158° 0	156° 3	156° 2	156° 9	155° 5	154° 6	153° 9	155° 0	156° 3
33	0	164° 1	165° 2	161° 9	158° 0	156° 1	156° 2	156° 2	155° 5	154° 1	153° 9	155° 2	156° 3
38	0	164° 1	165° 2	161° 7	158° 0	156° 1	155° 7	156° 2	155° 5	154° 1	153° 9	155° 2	156° 3
43	0	164° 1	165° 2	161° 9	157° 5	156° 4	155° 7	156° 2	155° 6	154° 1	154° 4	155° 8	156° 3
48	0	164° 1	164° 8	160° 9	157° 5	156° 0	156° 3	156° 2	155° 9	154° 1	154° 4	155° 8	156° 3
53	0	164° 4	164° 8	161° 2	156° 9	155° 9	156° 3	156° 2	155° 9	153° 8	154° 4	156° 2	156° 3
58	0												
Thermometer		51° 1	51° 1	51° 1	53° 5	54° 1	54° 0	54° 3	54° 1	53° 9	54° 4	54° 3	53° 8
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.					
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	°								
18	10	0	29° 752	39° 5	35° 3	E.	Very light.	Cloudy; cir.-cum. and cum.-strat.					
	11	0	29° 751	37° 6	34° 0	E.	Very light.	Cloudy; cir.-cum. and cum.-strat.					
	12	0	29° 750	35° 1	32° 1	E. by N.	Very light.	Cloudy; cir.-cum. and strat.					
	13	0	29° 735	33° 6	30° 4	E. by N.	Very light.	Cloudy; cir.-cum. and haze.					
	14	0	29° 736	32° 4	29° 3	E. N.E.	Very light.	Generally cloudy, with strat.					
	15	0	29° 716	33° 5	30° 2	N.E.	Very light.	Cloudy; cir.-cum. and cir.-strat.					
	16	0	29° 715	33° 9	30° 1	N.E.	Very light.	Cloudy; cir.-cum. and strat.					
	17	0	29° 720	33° 3	29° 4	N.E. by N.	Very light.	Cloudy; cir.-cum. and haze.					
	18	0	29° 722	32° 9	29° 2	N.E. by N.	Very light.	Cloudy; cir.-strat. and haze.					
	19	0	29° 715	34° 6	31° 2	N.N.E.	Very light.	Cloudy; cir.-cum. and strat.					
	20	0	29° 690	34° 6	30° 7	—	Calm.	Cloudy; cir.-cum. and strat.					
	21	0	29° 681	34° 1	31° 7	—	Calm.	Cloudy; cir.-cum., with haze.					

\* At 19<sup>th</sup> 10<sup>h</sup>, Thermometer of H.F., 56° '3; of V.F., 56° '2.



April 22nd and 23rd.			MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.			Angular Value of one Scale Division = 0°721.					DECLINATION.						
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		108°9	111°9	111°9	113°0	110°7	112°6	112°8	111°9	113°0	113°6	114°0	
5	0		109°8	112°0	111°8	113°8	110°9	112°2	112°8	111°2	113°0	113°6	114°2	
10	0		110°0	112°2	112°2	111°7	110°4	112°1	112°7	111°8	113°0	113°8	114°8	
15	0		110°0	112°6	112°0	111°4	109°2	112°0	112°9	112°0	113°0	113°8	114°8	
20	0		109°8	112°8	112°0	113°8	111°0	112°2	112°9	111°7	113°0	114°0	114°7	
25	0		110°3	112°6	111°2	112°2	111°9	112°4	112°8	112°2	112°3	113°6	114°3	
30	0		110°7	112°4	110°8	111°8	112°0	112°6	112°1	112°2	113°0	113°4	114°2	
35	0		110°9	112°2	110°3	111°8	111°8	112°8	112°1	112°0	113°0	113°8	114°3	
40	0		111°0	112°2	111°2	112°2	112°0	113°0	112°0	112°0	112°8	113°0	114°3	
45	0		111°0	112°3	111°0	112°9	112°8	113°0	112°1	112°0	113°0	114°2	114°3	
50	0		111°8	112°2	115°9	112°1	112°3	113°0	112°2	112°3	113°4	114°0	114°7	
55	0		111°8	111°8	113°8	111°4	112°2	113°0	112°1	112°7	113°3	114°0	114°8	
			One Scale Division = '000087 parts of the H. F.					HORIZONTAL FORCE.						
M.	S.													
7	0		588°5	593°2	592°0	596°8	587°0	585°8	585°9	586°9	585°2	586°0	587°0	
12	0		589°0	593°0	590°9	597°9	587°1	585°6	586°0	585°5	585°0	585°9	587°2	
17	0		589°8	593°8	588°2	595°5	583°0	586°0	586°0	585°8	585°0	586°2	588°0	
22	0		587°0	600°8	588°6	575°0	583°0	586°0	586°5	586°0	585°0	586°4	588°2	
27	0		590°2	601°0	585°6	578°0	582°0	586°0	587°0	585°0	586°0	586°6	588°2	
32	0		590°3	600°0	585°8	579°2	581°2	585°9	587°0	586°0	585°9	586°6	588°0	
37	0		592°9	598°8	581°8	579°2	581°1	586°0	587°0	586°0	586°0	586°8	587°6	
42	0		595°5	599°4	585°0	579°0	584°0	586°1	586°0	586°0	586°8	586°2	587°5	
47	0		595°0	596°0	581°8	581°2	581°2	586°2	586°5	586°0	586°0	586°2	587°5	
52	0		595°0	594°2	580°0	585°8	585°0	586°2	586°1	586°0	585°0	586°3	588°0	
57	0		593°2	591°0	581°2	588°5	585°8	586°2	586°5	586°0	585°3	586°4	587°8	
			591°2	591°2	573°8	589°0	585°8	586°0	586°5	585°5	585°3	587°0	588°3	
Thermometer			60°2	60°3	60°0	60°1	60°3	60°4	59°0	59°5	59°4	59°1	59°4	
			One Scale Division = '000063 parts of the V. F.					VERTICAL FORCE.						
M.	S.													
3	0		206°4	207°6	209°4	209°1	202°5	200°3	200°6	203°1	203°3	203°7	201°2	
8	0		206°6	208°1	209°6	209°1	202°5	200°2	201°4	203°1	203°1	203°7	201°0	
13	0		206°6	208°9	210°3	207°5	202°1	200°4	201°4	203°1	203°1	203°3	201°0	
18	0		206°4	208°6	210°3	207°0	201°9	200°5	201°4	203°1	203°4	201°2	201°1	
23	0		205°4	208°6	210°7	205°7	200°9	200°3	202°4	203°3	203°4	201°4	201°1	
28	0		206°7	209°3	210°7	205°7	200°9	200°1	202°4	203°3	203°4	201°4	201°2	
33	0		207°6	209°3	210°7	205°1	201°3	199°9	202°4	203°3	203°4	201°3	201°2	
38	0		207°6	209°5	211°1	205°1	200°5	199°9	202°4	203°3	203°5	201°2	201°2	
43	0		207°5	209°3	211°0	203°4	200°5	200°1	203°3	203°3	203°6	201°2	201°2	
48	0		208°6	210°5	211°0	204°4	200°0	200°1	203°0	203°3	203°7	201°2	201°4	
53	0		207°5	210°4	210°7	203°6	200°0	200°5	203°0	203°3	203°7	201°2	201°4	
58	0		207°4	209°4	210°7	203°6	200°3	200°5	203°4	203°3	203°7	201°2	201°4	
Thermometer			59°4	59°6	60°0	60°0	61°1	61°1	60°6	60°2	60°0	60°0	59°2	

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.
				Dry.	Wet.	Direction.	Force.	
D.	H.	M.	In.	°	°			
22	10	0	29°704	52°0	18°2	E. by S.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.
	11	0	29°700	48°7	15°9	—	Calm.	Cloudy; cir.-cum., cir.-strat., and haze.
	12	0	29°672	46°8	41°3	—	Calm.	Cloudy; cir.-cum. and haze.
	13	0	29°668	41°8	43°0	—	Calm.	Cloudy; cir.-cum. and haze.
	14	0	29°680	43°8	42°1	S.W.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.
	15	0	29°668	44°2	42°7	—	Calm.	Cloudy; cir.-cum.
	16	0	29°656	43°6	42°8	—	Calm.	Cloudy; cir.-cum.
	17	0	29°644	41°6	43°7	—	Calm.	Cloudy; cir.-cum. and haze.
	18	0	29°645	46°3	55°1	—	Calm.	Cloudy; cir.-cum., strat., and haze.
	19	0	29°645	46°5	45°5	—	Calm.	Cloudy; rain.
	20	0	29°652	46°6	44°6	—	Calm.	Cloudy; rain.
	21	0	29°648	46°3	44°6	—	Calm.	Cloudy; rain.

\* At 23<sup>d</sup> 10<sup>a</sup>, Thermometer of H. F., 61°°3; of V. F., 61°°0.





May 29th and 30th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	106° 8'	109° 2'	108° 2'	110° 0'	109° 8'	110° 4'	125° 6'	126° 0'	117° 0'	115° 2'	115° 4'	
5	0	107° 0'	109° 0'	108° 0'	109° 8'	109° 8'	109° 8'	127° 8'	124° 5'	118° 2'	114° 8'	116° 2'	
10	0	107° 2'	109° 0'	106° 8'	109° 3'	109° 6'	110° 2'	128° 0'	123° 6'	119° 1'	114° 8'	115° 8'	
15	0	107° 8'	109° 3'	106° 0'	108° 8'	109° 7'	110° 6'	126° 6'	123° 2'	119° 6'	114° 9'	115° 0'	
20	0	108° 2'	109° 4'	106° 3'	109° 0'	109° 8'	112° 2'	124° 8'	123° 4'	119° 2'	115° 0'	114° 3'	
25	0	109° 0'	109° 0'	107° 0'	109° 2'	110° 2'	114° 4'	125° 0'	123° 6'	119° 0'	114° 7'	114° 2'	
30	0	109° 4'	108° 8'	107° 6'	109° 0'	110° 4'	118° 0'	127° 8'	123° 6'	119° 0'	114° 8'	114° 4'	
35	0	109° 8'	108° 8'	108° 0'	109° 0'	110° 0'	122° 2'	129° 6'	121° 4'	117° 8'	115° 3'	115° 0'	
40	0	110° 0'	108° 8'	108° 2'	109° 2'	109° 4'	128° 0'	127° 6'	121° 2'	117° 2'	115° 8'	112° 4'	
45	0	110° 0'	108° 3'	109° 0'	109° 0'	109° 8'	125° 8'	121° 8'	120° 1'	117° 0'	115° 0'	112° 2'	
50	0	110° 0'	108° 2'	109° 7'	109° 2'	109° 4'	124° 6'	124° 2'	118° 8'	117° 0'	115° 4'	112° 0'	
55	0	110° 0'	108° 6'	110° 0'	109° 2'	109° 7'	124° 0'	125° 0'	118° 0'	116° 2'	115° 0'	111° 4'	
		One Scale Division = 1/1000007 parts of the H. E.						HORIZONTAL FORCE.					
M.	S.	582° 5'	588° 0'	576° 5'	575° 2'	578° 0'	578° 2'	580° 0'	569° 2'	569° 4'	570° 4'	571° 0'	
2	0	583° 8'	590° 0'	574° 0'	575° 0'	579° 2'	578° 4'	581° 6'	571° 2'	570° 8'	571° 5'	572° 2'	
12	0	583° 8'	591° 0'	572° 5'	575° 4'	577° 3'	578° 0'	584° 0'	570° 0'	572° 2'	573° 2'	573° 0'	
17	0	584° 5'	591° 0'	572° 0'	575° 7'	578° 0'	578° 2'	581° 6'	570° 0'	573° 2'	573° 0'	573° 8'	
22	0	585° 0'	589° 0'	572° 0'	576° 2'	577° 2'	580° 2'	577° 2'	569° 0'	572° 8'	573° 5'	573° 2'	
27	0	585° 0'	588° 0'	573° 4'	576° 4'	577° 0'	581° 0'	572° 8'	567° 4'	570° 5'	573° 0'	577° 0'	
32	0	587° 5'	588° 0'	569° 8'	577° 0'	578° 2'	584° 4'	572° 2'	567° 2'	570° 6'	574° 0'	578° 2'	
37	0	588° 5'	586° 0'	570° 4'	577° 2'	578° 4'	584° 2'	572° 8'	567° 2'	573° 4'	573° 4'	575° 8'	
42	0	589° 5'	583° 0'	571° 0'	577° 4'	578° 0'	584° 0'	571° 2'	567° 2'	567° 5'	573° 4'	575° 0'	
47	0	589° 0'	582° 0'	571° 8'	578° 0'	577° 2'	582° 0'	566° 8'	568° 8'	568° 0'	572° 0'	574° 4'	
52	0	598° 0'	580° 0'	573° 0'	578° 2'	577° 0'	584° 5'	565° 4'	570° 0'	569° 0'	572° 0'	574° 6'	
57	0	591° 0'	576° 5'	576° 2'	578° 4'	577° 4'	584° 0'	564° 2'	570° 4'	570° 0'	571° 8'	573° 2'	
Thermometer		73° 2'	73° 5'	72° 1'	72° 0'	71° 4'	71° 4'	71° 0'	70° 8'	70° 6'	70° 4'	70° 2'	
		One Scale Division = 1/1000063 parts of the V. E.						VERTICAL FORCE.					
M.	S.	179° 4'	181° 4'	182° 5'	182° 7'	182° 9'	179° 9'	174° 3'	177° 1'	174° 4'	179° 2'	182° 1'	
3	0	179° 4'	183° 0'	183° 0'	182° 7'	182° 1'	179° 9'	174° 3'	176° 7'	174° 7'	177° 7'	182° 1'	
8	0	179° 4'	183° 4'	182° 5'	182° 7'	182° 2'	179° 9'	174° 1'	174° 6'	175° 4'	178° 6'	182° 3'	
13	0	181° 4'	183° 4'	182° 5'	182° 8'	181° 8'	179° 9'	173° 0'	174° 6'	175° 4'	177° 8'	182° 6'	
18	0	181° 8'	183° 4'	182° 5'	182° 8'	180° 6'	179° 9'	171° 3'	174° 3'	174° 7'	177° 8'	182° 7'	
23	0	181° 8'	183° 4'	182° 5'	182° 9'	180° 4'	179° 9'	171° 3'	172° 9'	175° 0'	179° 4'	182° 7'	
28	0	182° 7'	183° 4'	182° 5'	182° 9'	180° 4'	179° 9'	171° 5'	172° 9'	175° 0'	179° 4'	182° 2'	
33	0	182° 7'	183° 4'	182° 5'	182° 9'	180° 4'	179° 9'	171° 5'	172° 9'	175° 0'	179° 4'	182° 2'	
38	0	182° 7'	183° 4'	182° 5'	182° 9'	179° 9'	179° 5'	171° 5'	172° 1'	173° 4'	179° 4'	181° 8'	
43	0	182° 7'	183° 4'	182° 5'	182° 6'	179° 9'	175° 5'	172° 0'	174° 4'	173° 4'	179° 9'	181° 5'	
48	0	182° 8'	183° 4'	182° 5'	182° 6'	179° 9'	175° 5'	171° 2'	174° 4'	173° 4'	181° 4'	181° 5'	
53	0	182° 8'	183° 4'	182° 5'	182° 6'	179° 9'	175° 5'	171° 6'	174° 4'	173° 0'	181° 4'	181° 3'	
58	0	181° 8'	183° 4'	182° 5'	182° 6'	179° 9'	175° 0'	177° 1'	174° 4'	177° 1'	182° 4'	181° 2'	
Thermometer		71° 9'	71° 5'	71° 3'	70° 8'	70° 5'	70° 9'	72° 3'	72° 3'	72° 3'	72° 3'	70° 8'	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind		Weather.					
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	°								
29	10	0	29° 27.5	69° 2'	63° 1'	E. by S.	Very light.	Cloudy; cir.-cum. and cum. strat.					
	11	0	29° 26.4	64° 8'	60° 2'	E. by S.	Very light.	Cloudy; cir.-cum. and cum.-strat.					
	12	0	29° 25.5	65° 0'	60° 2'	—	Calm.	Cloudy; cir.-cum. and cum.-strat.					
	13	0	29° 26.2	64° 0'	60° 0'	—	Calm.	Cloudy; cir.-cum., cum.-strat. and haze.					
	14	0	29° 25.2	61° 7'	58° 2'	E. by N.	Very light.	Cloudy; cir.-cum., cum.-strat. and haze.					
	15	0	29° 25.8	61° 7'	57° 3'	—	Calm.	Cloudy; cir.-cum., cum.-strat. and haze.					
	16	0	29° 24.0	61° 7'	57° 4'	—	Calm.	Overcast; rain, lightning, and thunder.					
	17	0	29° 24.7	62° 1'	57° 5'	—	Calm.	Overcast; rain, lightning, and thunder.					
	18	0	29° 22.7	62° 6'	58° 2'	—	Calm.	Overcast; rain, lightning, and thunder.					
	19	0	29° 24.1	61° 8'	59° 2'	E. by N.	Very light.	Overcast; lightning and thunder; occasional rain.					
	20	0	29° 20.3	59° 9'	58° 0'	N.N.E.	Very light.	Overcast; lightning, thunder, and occasional rain.					
	21	0	29° 19.9	60° 5'	58° 8'	N.N.E.	Very light.	Overcast; rain, with lightning and thunder.					

\* At 304° 10' Thermometer of H. E., 73° 5'; of V. E., 72° 0'.

MAGNETICAL OBSERVATIONS, May 29th and 30th.

DECLINATION, Angular Value of one Scale Division = 0° 7' 21".

19°.		20°.		21°.		22°.		23°.		24°.		25°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
110° 2	109° 2	115° 9	125° 0	130° 0	126° 0	120° 2	117° 0	106° 2	106° 2	97° 6	100° 0	104° 2	
109° 6	109° 1	117° 0	121° 8	131° 0	126° 0	119° 0	117° 0	106° 4	105° 8	98° 7	101° 0	104° 1	
108° 8	110° 2	118° 5	126° 0	130° 0	126° 0	118° 7	116° 2	106° 4	105° 8	99° 8	101° 8	104° 3	
107° 8	111° 7	120° 0	126° 8	127° 5	127° 0	117° 6	114° 4	107° 0	105° 0	109° 2	103° 3	104° 7	
107° 5	112° 6	120° 9	127° 0	127° 0	127° 4	118° 0	111° 2	111° 2	104° 0	100° 3	103° 4	105° 0	
106° 8	113° 8	121° 2	127° 0	127° 8	128° 8	117° 4	114° 8	111° 4	102° 8	100° 8	104° 0	105° 3	
106° 0	115° 0	121° 9	126° 2	128° 0	129° 4	117° 0	114° 8	111° 2	98° 6	100° 8	103° 9	105° 4	
107° 2	114° 7	122° 6	126° 0	128° 0	129° 0	117° 2	115° 0	110° 8	98° 7	100° 2	103° 9	105° 8	
106° 2	114° 8	121° 7	126° 8	128° 0	129° 4	117° 1	117° 2	109° 4	97° 7	100° 0	104° 0	105° 8	
106° 5	115° 9	122° 0	127° 8	127° 0	125° 7	116° 6	113° 6	107° 0	97° 4	100° 8	104° 4	105° 0	
107° 0	117° 0	123° 0	128° 7	127° 0	123° 0	117° 0	112° 0	105° 4	96° 5	100° 6	104° 0	106° 2	
108° 3	116° 9	124° 0	129° 7	126° 0	121° 3	117° 4	109° 6	106° 0	96° 8	100° 3	103° 4	106° 4	

HORIZONTAL FORCE, Increase, in Scale Divisions, corresponding to 1° decrease of temperature, 1° 63'.

572° 6	567° 0	573° 0	578° 0	567° 2	566° 0	551° 2	560° 2	555° 2	551° 2	551° 2	562° 2	575° 0
573° 7	566° 0	573° 4	579° 0	567° 2	565° 0	555° 0	559° 0	548° 8	550° 6	553° 5	563° 8	577° 0
571° 6	565° 9	578° 0	576° 5	568° 0	562° 5	556° 6	558° 2	551° 6	556° 6	560° 0	561° 4	578° 0
571° 6	568° 8	578° 0	579° 4	568° 5	561° 0	556° 4	556° 0	556° 2	556° 4	567° 0	573° 0	581° 2
571° 0	572° 0	578° 0	580° 9	571° 0	562° 2	555° 8	551° 8	551° 4	557° 4	568° 4	578° 8	580° 0
567° 4	569° 0	579° 4	581° 0	572° 0	566° 0	554° 2	555° 0	550° 0	554° 8	569° 0	578° 0	579° 8
566° 2	570° 9	578° 5	580° 0	569° 0	560° 6	551° 0	556° 2	547° 6	550° 6	567° 8	580° 0	580° 0
568° 2	572° 0	578° 0	577° 0	567° 5	560° 4	553° 2	557° 0	552° 5	546° 2	565° 0	579° 6	577° 0
567° 4	571° 0	578° 8	577° 0	568° 0	557° 2	557° 8	552° 2	545° 4	541° 5	564° 0	576° 6	576° 2
566° 2	571° 0	579° 0	574° 0	567° 0	557° 6	560° 0	551° 4	543° 4	543° 0	564° 0	571° 0	583° 0
565° 0	571° 8	578° 8	572° 0	567° 0	554° 0	557° 2	551° 6	551° 8	546° 8	564° 0	571° 1	584° 0
565° 2	574° 7	578° 0	569° 9	567° 0	554° 0	557° 4	554° 4	551° 6	551° 5	562° 0	571° 0	584° 0
70° 0	70° 0	69° 5	69° 0	69° 0	69° 0	68° 7	69° 4	70° 2	70° 8	71° 7	72° 4	73° 0

VERTICAL FORCE, Increase, in Scale Divisions, corresponding to 1° decrease of temperature, 1° 64'.

180° 6	171° 3	176° 1	181° 5	183° 0	181° 5	181° 3	182° 6	179° 1	177° 2	177° 7	179° 6	183° 2
180° 0	173° 9	176° 1	181° 5	183° 3	181° 3	181° 3	181° 9	178° 6	177° 2	177° 9	179° 9	183° 7
179° 2	173° 9	176° 0	182° 1	183° 3	181° 3	183° 9	181° 9	178° 2	177° 2	178° 8	180° 4	183° 8
178° 3	174° 0	176° 1	182° 1	183° 8	183° 8	183° 9	181° 9	177° 2	178° 7	179° 1	182° 2	183° 8
177° 8	174° 0	176° 1	182° 2	183° 8	183° 8	183° 8	181° 9	177° 9	178° 4	179° 2	182° 2	184° 7
176° 1	176° 3	176° 4	183° 7	183° 1	183° 8	183° 4	181° 6	177° 9	177° 7	180° 0	182° 8	184° 7
176° 0	177° 4	176° 4	183° 7	183° 1	183° 1	183° 4	180° 9	176° 6	179° 2	179° 0	183° 0	184° 7
176° 0	177° 3	178° 6	183° 1	183° 1	183° 1	183° 4	180° 9	176° 6	177° 4	179° 0	183° 0	184° 7
175° 4	176° 8	178° 6	183° 1	183° 1	183° 1	183° 4	180° 9	176° 6	178° 2	179° 1	183° 0	184° 7
174° 7	176° 8	178° 6	182° 8	183° 1	183° 2	183° 3	179° 9	176° 6	177° 3	179° 1	183° 0	186° 0
174° 3	176° 4	180° 3	182° 8	183° 1	184° 3	182° 6	179° 9	176° 5	177° 4	179° 1	183° 0	186° 0
174° 3	176° 1	180° 3	182° 9	184° 6	181° 3	182° 6	179° 1	176° 5	177° 6	180° 3	183° 3	186° 0
72° 5	71° 5	71° 2	70° 0	69° 0	68° 5	68° 7	68° 9	69° 5	69° 9	70° 7	71° 3	71° 5

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Guttingen Time.	Barometer at 32°.	Thermometers.			Wind.		Weather.
		Dry.	Wet.	Direction.	Force.		
						°	
D. H. M.	In.	°	°				
29 22 0	29° 201	60° 4	59° 2	N.N.E.	Very light.	Cloudy; rain, lightning, and thunder.	
23 0	29° 192	60° 4	59° 3	—	Calm.	Cloudy; rain, lightning, and thunder.	
30 0 0	29° 207	60° 2	58° 8	—	Calm.	Cloudy; cir-cum. and strat.	
1 0 0	29° 213	58° 7	57° 8	—	Calm.	Cloudy; cir-cum. and strat.	
2 0 0	29° 215	61° 5	60° 2	—	Calm.	Cloudy; cir-cum.	
3 0 0	29° 225	61° 7	62° 2	—	Calm.	Cloudy; cir-cum.	
4 0 0	29° 225	70° 3	68° 0	—	Calm.	Cloudy; cir-strat.	
5 0 0	29° 221	71° 9	69° 0	—	Calm.	Cloudy; cir-cum. and strat.	
6 0 0	29° 210	72° 5	69° 7	—	Calm.	Cloudy; cir-cum. and cir-strat.	
7 0 0	29° 207	73° 5	69° 9	—	Calm.	Cloudy; cir-cum. and cir-strat.	
8 0 0	29° 201	72° 1	68° 7	—	Calm.	Cloudy; cir-strat.	
9 0 0	29° 195	73° 0	68° 3	—	Calm.	Cloudy; cir-cum. and cir-strat.	

June 24th and 25th.		MAGNETICAL OBSERVATIONS.										
Mean Göttingen Time.	Angular Value of one Scale Division = 0° 721.										DECLINATION.	
	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M. s.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
0 0	110'2	113'2	114'4	114'4	112'7	113'1	112'2	112'5	111'9	112'6	111'2	111'2
5 0	110'2	113'6	111'2	111'3	113'0	113'4	112'8	112'2	112'0	112'1	112'1	112'1
10 0	110'4	114'7	114'0	114'5	113'0	113'2	112'6	112'2	112'0	112'0	112'0	112'0
15 0	111'2	115'0	114'2	114'0	114'4	113'9	112'7	112'2	111'9	112'1	111'9	111'9
20 0	111'2	115'2	114'4	114'5	114'8	113'8	112'6	112'2	112'0	112'1	111'8	111'8
25 0	111'0	115'4	114'8	114'4	114'2	113'8	112'7	112'2	112'2	112'2	112'1	111'0
30 0	111'4	115'4	115'0	114'0	113'8	113'8	112'0	111'5	112'0	112'0	112'0	111'6
35 0	112'0	115'0	115'4	113'8	113'2	112'8	112'0	111'7	112'0	112'0	112'0	112'0
40 0	112'0	115'2	115'0	113'9	113'0	112'2	112'1	111'6	111'8	112'3	112'0	112'0
45 0	112'6	114'8	114'8	113'2	113'2	112'2	112'1	111'6	111'9	111'9	112'0	112'0
50 0	112'8	114'8	115'0	113'0	113'2	112'0	112'2	111'8	111'9	111'9	113'1	113'1
55 0	113'4	114'6	114'2	112'8	113'0	111'7	112'1	111'9	112'2	111'7	112'1	112'1
		One Scale Division = '000087 parts of the H. F.										HORIZONTAL FORCE.
M. s.	587'2	584'6	571'0	575'6	575'8	575'2	577'6	578'5	577'8	579'0	581'0	581'0
2 0	585'6	585'4	571'2	576'0	575'6	576'8	577'2	576'2	577'8	578'0	582'0	582'0
7 0	584'2	585'0	575'0	575'0	576'8	576'7	577'0	576'0	578'0	581'2	581'3	581'3
12 0	585'8	584'6	575'4	575'0	577'0	576'0	578'5	577'0	578'1	578'8	581'1	581'1
17 0	582'4	584'8	575'0	574'8	577'2	575'2	578'0	576'2	578'8	579'0	582'0	582'0
22 0	580'2	585'0	574'8	574'0	575'2	576'0	577'4	576'0	579'0	579'5	581'4	581'4
27 0	579'6	582'2	574'2	573'0	576'4	576'6	577'2	577'5	577'9	579'5	580'0	580'0
32 0	578'8	576'0	574'0	574'4	575'5	575'8	576'9	577'5	577'3	579'1	582'0	582'0
37 0	577'0	574'8	577'2	574'0	575'0	576'0	576'6	578'6	578'6	581'0	582'0	582'0
42 0	580'0	573'6	577'4	574'5	575'0	576'0	576'4	579'0	578'0	580'0	581'0	581'0
47 0	582'2	573'8	575'8	574'2	574'8	576'8	577'7	578'0	578'0	581'0	581'0	581'0
52 0	582'8	570'5	575'2	575'8	575'2	577'6	577'7	577'7	578'4	581'0	581'0	581'0
57 0												
Thermometer	73'3	73'8	73'9	73'8	73'0	72'5	72'1	71'9	71'4	70'6	70'4	70'4
		One Scale Division = '000063 parts of the V. F.										VERTICAL FORCE.
M. s.	181'5	182'6	180'6	182'0	179'1	176'3	177'0	174'8	174'5	176'4	178'7	178'7
3 0	183'2	181'9	180'6	181'7	178'4	176'3	177'0	174'7	174'5	176'4	178'7	178'7
8 0	183'3	182'8	180'6	181'9	178'4	175'9	177'0	174'3	174'8	176'1	178'7	178'7
13 0	183'3	182'3	180'8	181'9	177'7	175'9	177'0	174'3	174'8	177'2	178'7	178'7
18 0	183'3	182'3	181'8	181'6	177'7	176'2	177'1	174'2	174'8	178'4	178'7	178'7
23 0	181'7	182'6	180'9	181'6	177'3	176'2	177'1	174'2	174'8	178'4	178'7	178'7
28 0	181'8	182'4	180'9	181'9	177'2	176'5	177'1	174'2	174'8	178'7	178'7	178'7
33 0	181'6	181'1	180'9	181'9	177'0	176'2	177'6	174'2	174'8	178'7	178'7	178'7
38 0	181'6	181'1	181'2	181'9	176'3	176'2	177'6	174'3	174'9	178'7	178'7	178'7
43 0	181'6	181'1	181'2	181'9	176'3	176'2	177'6	174'3	174'9	178'7	178'7	178'7
48 0	181'6	181'5	181'1	181'7	176'3	176'5	177'6	174'3	174'9	178'7	178'7	178'7
53 0	181'6	181'5	182'2	181'0	176'3	177'0	177'1	174'3	175'1	178'7	177'4	177'4
58 0	181'4	180'6	182'0	180'4	176'3	177'0	177'1	174'3	175'7	178'7	177'4	177'4
Thermometer	71'3	71'9	72'3	72'4	72'7	73'5	73'3	72'9	73'0	72'5	71'5	71'5
Increasing Numbers denote decreasing Westerly Declination.												
METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.						
		Dry.	Wet.	Direction.	Force.							
D. H. M.	In.	°	°									
24 10 0	29'739	80'1	59'4	N.W. by N.	Light.	Clear and fine.						
11 0	29'719	79'5	61'9	N.N.W.	Moderate.	Clear and fine.						
12 0	29'713	77'8	62'1	N.N.W.	Moderate.	Clear and fine.						
13 0	29'721	74'0	63'5	N.N.W.	Moderate.	Clear and cloudless.						
14 0	29'719	68'7	58'4	N.N.W.	Light.	Clear and cloudless.						
15 0	29'735	67'3	56'2	—	Calm.	Clear; fine.						
16 0	29'731	65'3	55'7	—	Calm.	Clear; very fine.						
17 0	29'722	66'2	55'3	—	Calm.	Clear; very fine.						
18 0	29'726	65'5	54'5	—	Calm.	Clear; very fine.						
19 0	29'720	65'3	54'6	—	Calm.	Clear.						
20 0	29'703	64'4	53'6	—	Calm.	Clear; fine.						
21 0	29'704	64'4	53'4	N.W. by N.	Very Light.	Clear; fine.						

\* At 25° 10', Thermometer of H. F., 76° '5; of V. F., 74° '7.



July 22nd and 23rd.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0".721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	108.2	109.2	110.2	110.4	111.4	111.7	112.4	112.0	113.2	116.0	118.0	118.0
5	0	107.8	109.0	109.4	111.0	112.0	111.6	112.8	112.2	113.8	116.2	117.3	117.3
10	0	107.8	109.0	109.0	110.8	111.8	111.6	113.2	112.6	114.0	117.0	116.0	116.0
15	0	107.8	109.2	110.2	111.2	112.0	111.5	113.0	112.8	114.1	116.3	115.8	115.8
20	0	107.8	109.4	110.0	111.0	112.4	111.4	112.5	112.8	115.2	114.9	115.8	115.8
25	0	108.0	109.7	109.6	110.8	112.6	111.8	112.8	112.8	116.0	114.0	115.7	117
30	0	108.2	109.2	110.2	110.8	111.4	112.0	112.4	112.4	117.2	113.8	116.0	116
35	0	108.6	109.2	109.2	111.2	111.8	113.2	112.2	112.4	118.2	114.0	115.3	116
40	0	108.8	109.3	109.6	111.0	111.6	113.6	113.0	113.7	117.0	111.3	115.0	116
45	0	109.0	109.2	109.2	111.0	111.0	113.2	112.9	113.2	116.3	116.0	115.0	117
50	0	109.2	109.4	110.2	111.2	110.8	112.8	112.4	113.0	116.0	117.0	114.1	115
55	0	109.0	110.0	110.0	111.4	111.4	112.4	112.0	113.2	116.4	118.0	114.0	109
		One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
M.	S.	581.8	581.2	579.8	577.8	579.6	578.8	581.8	580.9	582.0	581.0	582.0	578
7	0	582.0	581.4	577.7	578.4	579.8	578.2	581.4	581.0	582.0	579.2	579.8	577
12	0	578.8	581.2	578.3	579.2	580.8	578.4	581.6	581.0	582.2	580.7	579.8	576
17	0	579.2	581.0	578.0	579.4	581.4	578.6	581.8	581.4	582.0	580.0	579.4	577
22	0	578.6	580.6	577.4	578.8	579.8	576.8	579.8	581.6	583.9	578.6	579.9	577
27	0	579.3	583.2	577.0	577.2	578.8	579.2	580.0	581.6	581.1	582.0	578.6	576
32	0	580.6	582.6	577.4	577.2	578.0	579.2	580.0	581.6	581.0	586.0	578.0	575
37	0	581.2	582.7	578.0	578.8	580.2	579.8	580.4	581.6	581.0	588.7	577.8	573
42	0	581.4	582.2	578.2	580.0	578.5	580.4	581.0	582.0	582.0	587.0	577.8	573
47	0	581.6	580.8	578.4	579.8	576.6	580.6	581.2	583.2	581.4	585.0	577.1	570
52	0	581.0	580.6	579.2	580.0	577.5	580.4	580.4	583.6	581.0	582.8	577.5	569
57	0	581.0	580.6	579.4	581.4	578.8	580.2	580.2	582.0	581.0	581.5	577.5	566
Thermometer		75.5	75.6	75.5	75.2	74.8	74.5	73.6	73.0	73.0	73.0	72.5	72
		One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
M.	S.	168.3	172.7	172.7	172.8	172.2	170.4	173.5	175.1	175.4	173.0	168.5	170
3	0	167.9	172.7	172.9	172.8	172.0	170.4	174.5	175.1	175.4	173.1	168.5	170
8	0	168.8	172.8	173.0	172.9	172.0	170.4	173.4	175.6	175.4	172.7	169.1	170
13	0	170.0	173.2	173.0	172.9	171.3	170.4	174.1	175.6	175.4	172.7	169.1	170
18	0	172.4	173.2	173.1	172.7	171.3	170.1	174.1	175.6	175.1	172.7	169.1	169
23	0	173.2	173.2	173.1	172.7	171.0	170.5	174.1	175.6	175.1	171.8	169.1	169
28	0	173.2	173.3	173.0	172.7	170.6	170.5	173.9	175.6	173.2	171.8	169.4	169
33	0	173.5	173.3	172.7	173.1	170.7	170.3	173.9	175.6	173.9	170.2	169.4	169
38	0	173.5	173.3	172.7	173.1	170.7	170.3	173.9	175.6	173.2	169.5	170.1	168
43	0	173.3	173.2	172.6	173.3	170.7	170.1	173.9	175.4	173.2	168.0	170.5	166
48	0	173.3	173.3	172.7	173.3	170.7	170.2	173.9	175.4	173.2	168.0	170.6	166
53	0	172.8	173.3	172.8	173.5	170.4	170.3	173.9	175.4	173.2	168.0	170.6	164
58	0	172.8	173.3	172.8	173.5	170.4	170.3	173.9	175.4	173.2	168.0	170.6	72
Thermometer		74.5	74.7	74.7	74.5	74.7	74.1	73.7	73.0	72.9	73.0	73.1	and
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.					
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	°								
22	10	0	29.534	74.1	67.4	—	Calm.	Cloudy; cir.-strat. and cir. cum.					
	11	0	29.533	73.1	67.3	—	Calm.	Cloudy; cum.-strat. and cir. cum.					
	12	0	29.505	73.1	66.9	—	Calm.	Cloudy; cum.-strat.					
	13	0	29.506	69.1	61.7	—	Calm.	Cloudy; cum.-strat.					
	14	0	29.515	63.3	60.7	—	Calm.	Cloudy; cir.-strat. and cir. cum.					
	15	0	29.508	61.9	60.1	—	Calm.	Cloudy; cir.-strat. and cir. cum.					
	16	0	29.518	59.9	58.6	—	Calm.	Cloudy; cir.-strat. and cir. cum.					
	17	0	29.511	59.5	57.1	—	Calm.	Cloudy; cum.-strat.					
	18	0	29.509	59.1	57.1	—	Calm.	Cloudy; cum.-strat.					
	19	0	29.486	58.5	57.1	—	Calm.	Cloudy; cir. cum. and cir.-strat.					
	20	0	29.467	56.9	55.5	—	Calm.	Cloudy; cir.-cum. and cir.-strat.					
	21	0	29.465	55.8	54.4	E.N.E.	Very light.	Cloudy; cir.-strat.					

\* At 23° 10', Thermometer of H. F., 77° 3'; of V. F., 76° 1'.

MAGNETICAL OBSERVATIONS.

July 22nd and 23rd.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

19°.		20°.		21°.		22°.		23°.		24°.		25°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
116°0	118°0	115°0	117°0	114°0	116°0	113°0	115°0	112°0	114°0	111°0	113°0	110°0	112°0
116°2	117°3	115°2	117°3	114°2	116°3	113°2	115°3	112°2	114°3	111°2	113°3	110°2	112°3
117°0	116°0	116°0	118°0	115°0	117°0	114°0	116°0	113°0	115°0	112°0	114°0	111°0	113°0
116°3	115°8	116°3	118°3	115°3	117°3	114°3	116°3	113°3	115°3	112°3	114°3	111°3	113°3
114°9	115°8	117°0	116°0	116°0	118°0	115°0	117°0	114°0	116°0	113°0	115°0	112°0	114°0
114°0	115°7	117°2	116°2	116°2	118°2	115°2	117°2	114°2	116°2	113°2	115°2	112°2	114°2
113°8	116°0	117°4	116°4	116°4	118°4	115°4	117°4	114°4	116°4	113°4	115°4	112°4	114°4
114°0	115°3	117°6	116°6	116°6	118°6	115°6	117°6	114°6	116°6	113°6	115°6	112°6	114°6
116°0	115°0	117°8	116°8	116°8	118°8	115°8	117°8	114°8	116°8	113°8	115°8	112°8	114°8
117°0	114°1	118°0	117°0	117°0	119°0	116°0	118°0	115°0	117°0	114°0	116°0	113°0	115°0
118°0	114°0	118°2	117°2	117°2	119°2	116°2	118°2	115°2	117°2	114°2	116°2	113°2	115°2

I. FORCE.

581°0	582°0
579°2	579°8
580°7	579°8
580°0	579°4
578°6	579°9
582°0	578°6
586°0	578°0
588°7	577°8
587°0	577°8
585°0	577°1
582°8	577°5
581°5	577°5

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 61.

578°0	559°7	577°0	585°4	587°2	580°4	559°5	565°5	565°5	574°0	572°0	571°5	572°0
577°5	561°0	577°0	581°8	588°2	577°0	560°0	566°8	565°0	573°0	571°0	572°0	573°2
576°9	565°4	578°6	581°2	590°2	576°4	560°0	561°3	561°7	574°0	571°0	571°0	575°0
577°5	566°2	579°0	586°0	588°8	574°2	557°6	561°0	565°6	571°5	572°0	573°7	577°5
577°0	570°0	579°4	586°6	587°8	573°4	561°8	561°0	565°0	571°9	572°0	579°0	584°5
576°1	571°4	579°2	587°0	587°2	573°4	559°0	565°0	567°2	573°0	572°6	579°3	584°0
575°5	573°0	579°0	587°2	586°0	573°4	560°2	564°0	569°8	571°5	572°2	578°0	597°0
575°5	573°2	579°2	587°3	584°2	572°0	561°8	561°8	570°0	571°0	571°3	574°5	594°0
575°0	573°6	579°4	587°6	581°0	571°2	562°8	563°1	568°8	574°0	573°2	576°5	588°0
575°5	574°5	580°8	587°4	585°4	570°8	562°0	565°0	571°0	572°0	572°0	577°2	587°5
569°0	575°0	583°3	586°8	586°8	567°2	461°6	564°5	571°4	572°0	572°5	576°5	581°5
566°4	575°1	581°4	588°4	585°4	566°2	561°8	566°0	573°0	571°2	571°5	574°6	578°0

Force.

173°0	168°5
173°1	168°5
172°7	169°1
172°7	169°1
172°7	169°1
171°8	169°1
171°8	169°4
170°2	169°4
169°5	170°1
168°0	170°5
168°0	170°6
168°0	170°6

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

170°6	162°4	166°1	170°2	172°9	173°0	171°0	169°7	169°8	168°9	167°9	169°9	173°1
170°6	163°6	166°3	170°3	173°2	173°3	170°7	169°7	168°9	168°9	167°9	170°3	173°1
170°0	164°9	166°3	170°3	173°2	172°9	170°7	169°5	168°9	168°9	167°9	170°9	173°3
170°0	163°6	166°3	172°0	173°2	173°2	170°2	169°7	168°3	168°9	168°7	171°3	173°9
169°6	162°9	166°3	171°5	174°3	173°2	171°0	169°7	168°3	168°9	168°7	172°2	174°9
169°6	161°8	166°5	172°5	174°3	173°3	169°6	169°7	168°1	168°9	168°7	172°2	174°5
169°6	161°8	166°4	172°4	171°5	173°3	168°6	169°7	169°8	168°9	169°6	172°8	176°3
168°9	162°2	166°5	172°4	174°5	173°3	168°4	170°1	169°8	168°9	169°6	172°8	175°0
168°0	162°0	166°2	172°3	173°6	173°3	168°4	170°1	169°3	168°2	169°6	172°8	174°2
166°5	163°2	166°4	171°9	173°6	173°3	168°4	169°8	169°3	168°2	169°9	173°1	174°2
166°5	163°3	166°3	172°7	173°6	173°4	168°3	169°8	169°3	168°2	169°9	173°1	174°2
164°2	163°2	167°5	172°9	173°8	172°8	168°9	169°8	169°3	167°9	169°9	173°1	173°1

Westerly Deviation.

73°0	73°1
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean (10) time.	Baromet. at 32°.	Thermometers.		Wind.		Weather
		Dry.	Wet.	Direction.	Force.	
22 22 0	29° 445	56° 7	55° 9	—	Calm.	Cloudy; cir.-cum. and strat.
23 0 0	29° 465	57° 9	56° 9	—	Calm.	Cloudy; cir.-cum. and strat.
23 0 0	29° 492	61° 5	59° 7	—	Calm.	Cloudy; fine.
1 0 0	29° 501	66° 7	61° 7	—	Calm.	Cloudy; fine.
2 0 0	29° 492	70° 8	64° 5	—	Calm.	Cloudy; fine.
3 0 0	29° 471	74° 6	65° 2	—	Calm.	Fine; cir.-cum. and strat.
4 0 0	29° 460	79° 1	69° 3	—	Calm.	Fine; cir.-cum. and strat.
5 0 0	29° 456	76° 7	69° 4	—	Calm.	Fine; cir.-cum. and cir.-strat.
6 0 0	29° 438	78° 8	70° 4	—	Calm.	Cloudy; fine, with cir.-cum.
7 0 0	29° 431	79° 9	70° 7	—	Calm.	Cloudy; fine.
8 0 0	29° 425	80° 9	68° 5	—	Calm.	Cloudy; cir.-cum. and strat.
9 0 0	29° 406	79° 5	67° 8	—	Calm.	Cloudy; cir.-cum. and cir.-strat.

August 28th and 29th.												MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.		Angular Value of one Scale Division = 0°.721.										DECLINATION.											
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.											
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
0	0	119°0	118°3	105°2	107°0	109°9	120°0	135°4	112°2	111°0	108°9	106°6											
5	0	119°6	119°1	106°0	107°5	111°0	124°5	128°0	111°0	110°3	108°0	107°0											
10	0	128°2	114°0	106°7	107°4	113°2	126°7	120°9	113°3	109°5	108°7	106°2											
15	0	132°8	110°2	106°9	107°0	114°2	133°8	119°0	111°0	109°7	109°0	107°0											
20	0	128°1	113°5	107°0	107°2	123°8	138°0	119°7	115°2	108°2	109°0	106°4											
25	0	127°2	108°0	107°3	106°7	129°0	142°0	115°3	115°0	108°3	109°6	108°2											
30	0	123°0	106°2	107°2	107°8	131°5	148°4	116°0	115°0	109°3	111°2	108°0											
35	0	119°0	104°8	106°0	107°3	141°0	147°9	119°6	113°7	107°0	109°2	106°2											
40	0	119°9	104°2	106°0	107°0	137°8	139°7	120°3	112°0	101°6	114°0	108°2											
45	0	117°2	103°0	106°2	107°2	131°0	112°8	116°0	111°2	104°1	113°8	108°2											
50	0	113°1	103°6	106°5	106°5	126°8	117°0	113°3	111°0	105°0	113°2	108°7											
55	0	116°6	101°2	107°0	108°5	125°4	141°8	112°3	111°4	107°5	112°6	108°3											
M.		One Scale Division = .000087.										HORIZONTAL FORCE.											
		0	5	10	15	20	25	30	35	40	45	50	55										
0	0	614.8	577.8	560.4	554.0	578.0	587.5	561.0	564.0	571.0	575.0	567.4											
5	0	612.2	575.3	551.0	554.0	578.0	580.5	547.0	564.0	574.0	572.2	567.2											
10	0	621.4	572.0	561.0	554.0	570.0	580.9	540.0	566.5	576.7	564.0	566.8											
15	0	621.2	570.6	561.4	555.9	568.0	586.6	538.5	568.0	577.5	562.2	572.2											
20	0	611.2	566.2	566.2	576.0	570.8	586.5	547.0	567.5	573.5	561.4	575.0											
25	0	603.8	571.0	576.7	575.8	578.0	589.0	541.0	564.6	572.5	561.2	575.4											
30	0	598.2	562.2	573.0	574.5	586.5	586.5	543.5	565.5	576.5	566.6	576.2											
35	0	595.2	566.0	569.5	571.0	588.4	585.8	552.5	569.0	576.5	567.0	574.4											
40	0	563.8	561.4	570.0	571.5	591.6	577.0	559.0	565.5	571.0	567.4	575.0											
45	0	591.0	563.4	569.0	571.0	589.9	569.4	564.0	567.0	571.5	567.2	573.6											
50	0	582.3	561.0	566.0	572.0	590.0	569.0	564.0	569.0	571.5	567.6	577.0											
55	0	582.4	561.5	570.0	577.5	594.5	573.0	564.0	569.0	573.5	568.4	576.2											
Thermometer		76°0	75°8	75°8	75°6	75°6	75°4	75°0	74°5	74°1	74°0	73°7											
M.		One Scale Division = .000062.										VERTICAL FORCE.											
		0	5	10	15	20	25	30	35	40	45	50	55										
0	0	189°3	188°8	176°2	171°1	170°0	155°7	155°6	167°9	169°7	162°5	162°9											
5	0	188°6	187°0	174°5	171°1	170°0	155°7	153°3	167°9	168°4	158°2	162°0											
10	0	189°0	185°7	174°1	171°1	169°6	155°6	153°3	168°4	167°2	160°2	162°2											
15	0	184°6	185°3	174°3	171°6	169°6	149°5	156°4	168°7	165°3	158°1	161°2											
20	0	182°9	183°1	175°4	171°6	164°8	147°6	158°0	168°7	164°0	157°9	161°7											
25	0	182°9	182°5	175°1	171°6	160°2	147°2	158°0	167°3	164°4	158°6	163°4											
30	0	184°0	179°5	175°8	171°5	162°2	148°7	162°2	167°3	165°1	157°0	165°1											
35	0	181°7	179°3	175°4	171°5	159°1	148°7	165°8	168°7	164°1	158°1	166°7											
40	0	185°4	178°4	172°9	171°5	159°1	148°0	165°8	165°5	163°3	157°8	166°6											
45	0	186°9	177°8	174°9	171°5	151°4	148°0	166°5	168°9	162°2	159°5	166°2											
50	0	187°7	178°0	174°0	171°5	151°4	149°3	166°5	170°8	162°2	149°7	166°7											
55	0	189°1	176°9	174°1	171°5	154°6	149°7	166°5	170°5	162°2	162°2	167°9											
Thermometer		74°5	74°5	74°7	74°8	76°1	76°0	75°5	75°2	75°0	74°9	74°7											
Increasing Numbers denote decreasing westerly Declination.																							
METEOROLOGICAL OBSERVATIONS.																							
Mean Gottingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.														
					Dry.	Wet.	Direction.	Force.															
D.	H.	M.	In.	°	°																		
28	10	0	29°709	74°6	70°1	E.S.E.	Very light.	Cloudy; cum-strat. and cir-cum.															
28	11	0	29°705	72°1	69°7	N.N.E.	Very light.	Cloudy; cum-strat. and cir-cum.															
28	12	0	29°713	71°7	68°3	—	Calm.	Cloudy; cum-strat. and cir-cum.															
28	13	0	29°709	69°3	67°3	—	Calm.	Clear, with strat. and cir-cum.															
28	14	0	29°703	67°9	66°3	—	Calm.	Clear; cir-cum.															
28	15	0	29°703	65°9	64°7	—	Calm.	Clear; cir-cum.															
28	16	0	29°697	65°6	61°1	—	Calm.	Clear; cir-cum. and cir-strat.; aurora visible.															
28	17	0	29°694	65°5	64°2	—	Calm.	Cloudy; sheet lightning in S.E.															
28	18	0	29°686	63°9	62°9	—	Calm.	Cloudy; fine.															
28	19	0	29°694	62°9	62°0	—	Calm.	Cloudy; fine; cir-cum.															
28	20	0	29°702	61°7	60°9	—	Calm.	Clear; cir. and cir-cum.															
28	21	0	29°689	60°9	60°1	—	Calm.	Clear; cir. and cir-strat.															

\* At 29° 10', Thermometer of H. F., 75° 5'; of V. F., 74° 4'.





September 23rd and 24th.			MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.			Angular Value of one Scale Division = 0° 721.						DECLINATION.					
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		103°5	104°6	99°3	107°0	108°5	107°8	118°8	112°7	109°0	112°0	117°1	
5	0		103°0	104°0	101°0	107°0	108°6	107°7	118°3	111°0	108°2	112°2	116°2	
10	0		103°8	104°0	106°8	106°6	108°2	107°2	121°0	108°8	107°7	113°3	115°6	
15	0		104°0	103°0	116°0	106°4	108°4	106°8	129°8	108°8	108°5	114°1	116°8	
20	0		104°2	102°0	120°0	105°7	109°0	106°2	126°2	109°0	106°4	113°3	116°8	
25	0		104°8	101°6	119°2	106°0	109°2	107°2	118°6	109°2	105°3	114°0	115°2	
30	0		104°8	102°0	116°0	106°2	108°0	109°2	111°6	109°2	107°0	115°0	118°2	
35	0		105°0	102°0	112°1	105°8	107°0	110°0	109°4	109°3	108°2	114°8	118°9	
40	0		105°0	102°0	108°2	108°0	106°2	110°0	107°5	109°8	108°8	114°2	118°2	
45	0		105°0	104°0	105°0	108°2	106°3	117°0	109°8	110°4	110°0	115°0	118°6	
50	0		105°0	104°1	104°8	109°0	106°2	118°8	113°0	109°8	110°2	115°3	117°8	
55	0		105°0	102°8	106°8	109°2	106°5	118°2	111°9	109°8	111°8	115°4	117°6	

M.			One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
M.	S.		590°4	612°4	587°6	590°0	591°2	593°4	571°4	581°4	586°0	593°2	587°8	
0	0		—	612°4	580°4	590°4	592°8	594°2	571°0	588°2	588°2	591°6	588°6	
5	0		—	611°4	577°4	589°3	593°1	593°8	584°4	587°4	589°6	590°6	590°6	
10	0		—	615°4	578°4	590°4	592°4	594°2	588°8	586°6	591°9	592°3	595°4	
15	0		—	612°2	581°4	538°6	591°8	593°8	590°9	590°2	595°1	593°4	593°8	
20	0		—	611°6	588°4	583°7	597°4	593°6	590°2	589°7	595°2	590°3	587°4	
25	0		—	610°9	586°9	589°0	597°0	592°6	589°4	592°2	594°7	590°6	583°4	
30	0		—	601°4	581°4	587°6	598°6	597°1	589°2	590°7	596°2	589°2	581°4	
35	0		—	594°9	584°4	586°8	596°4	593°4	583°8	590°4	597°6	588°6	582°6	
40	0		—	594°9	585°0	585°6	596°6	595°4	583°0	590°9	595°2	591°7	585°2	
45	0		610°9	594°1	581°8	588°4	594°0	581°8	586°9	591°4	595°2	591°4	586°0	
50	0		614°6	593°9	586°6	590°4	593°4	578°4	586°4	589°2	596°9	589°6	584°6	

Thermometer	69°4	70°2	70°2	70°2	70°0	69°7	69°5	69°6	69°6	69°4	69°0
Thermometer	69°4	70°2	70°2	70°2	70°0	69°7	69°5	69°6	69°6	69°4	69°0

M.			One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
M.	S.		184°4	185°0	190°2	184°2	182°1	180°8	185°7	180°6	179°1	178°8	177°2	
0	0		182°6	181°9	190°3	184°2	181°4	180°8	185°3	181°0	178°4	176°0	176°8	
5	0		182°6	184°9	190°5	184°5	180°5	182°5	186°3	181°0	180°7	176°0	176°7	
10	0		182°6	186°3	190°0	184°6	180°3	182°4	185°8	182°2	179°3	177°3	176°4	
15	0		182°6	186°0	188°8	184°8	180°8	181°4	183°7	181°4	179°1	176°5	176°9	
20	0		182°6	186°7	187°4	184°6	180°7	181°3	181°8	180°3	178°4	177°0	177°2	
25	0		183°1	187°6	186°6	184°8	180°7	185°8	183°4	180°3	178°4	177°5	180°2	
30	0		182°1	186°8	185°4	184°8	180°6	188°2	182°4	179°4	179°6	177°1	179°8	
35	0		183°1	186°3	185°4	184°1	180°7	188°5	181°8	179°4	179°4	176°9	178°7	
40	0		183°8	187°0	185°4	183°3	180°6	185°8	181°5	179°4	179°4	177°4	180°4	
45	0		183°8	187°9	183°9	182°8	180°6	186°4	182°5	179°4	179°2	176°8	178°6	
50	0		185°0	189°1	183°9	182°3	180°8	184°2	180°6	179°1	178°8	177°2	178°4	

Thermometer	67°9	68°5	68°6	70°0	70°3	70°5	70°0	70°5	70°0	69°7	70°1
Thermometer	67°9	68°5	68°6	70°0	70°3	70°5	70°0	70°5	70°0	69°7	70°1

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Gottingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
23	10	0	29°543	72°2	66°8	—	Calm.	Generally clear.			
11	0		29°528	69°9	65°8	—	Calm.	Generally clear.			
12	0		29°527	67°3	64°2	—	Calm.	Generally clear.			
13	0		29°555	66°7	64°7	—	Calm.	Generally clear; sheet lightning nearly round the horizon.			
14	0		29°562	65°9	64°3	—	Calm.	Generally clear; sheet lightning nearly round the horizon.			
15	0		29°543	65°7	63°7	—	Calm.	Generally clear; sheet lightning nearly round the horizon.			
16	0		29°552	64°8	63°5	—	Calm.	Clear; sheet lightning.			
17	0		29°554	62°6	61°7	—	Calm.	Clear; sheet lightning.			
18	0		29°562	63°1	62°3	—	Calm.	Clear; sheet lightning.			
19	0		29°554	64°1	63°1	—	Calm.	Clear; sheet lightning.			
20	0		29°553	63°3	62°6	—	Calm.	Generally clear.			
21	0		29°565	61°1	60°2	—	Calm.	Generally clear.			

\* At 24° 10', Thermometer of H. F., 65° 0'; of V. F., 67° 6'.

ON.

19 <sup>h</sup> .	20 <sup>h</sup> .
Sc. Div.	Sc. Div.
112°0	117°1
112°2	116°2
113°3	115°6
114°1	116°8
113°3	116°8
114°0	115°2
115°0	118°2
114°8	118°9
114°2	118°2
115°0	118°6
115°3	117°8
115°4	117°6

MAGNETICAL OBSERVATIONS. September 23rd and 24th.

DECLINATION. Angular Value of one Scale Division = 0'721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
117°8	116°8	117°7	116°8	121°0	119°0	116°3	111°0	106°2	103°8	101°5	101°2	103°5
120°6	117°3	117°2	116°2	119°2	118°1	118°0	110°0	106°0	103°8	100°8	101°1	106°2
118°4	117°5	116°2	116°4	118°8	119°4	116°4	111°2	105°3	103°2	99°5	102°0	105°8
118°0	117°7	115°8	116°5	120°2	117°8	117°0	110°0	105°7	103°2	99°6	103°2	105°0
117°5	117°6	116°0	116°1	120°0	117°8	118°0	108°6	105°7	103°0	99°8	105°0	104°7
117°8	117°2	116°2	117°2	119°0	118°0	117°2	110°0	105°3	102°9	99°4	105°0	104°3
118°7	117°2	115°8	118°0	120°0	117°8	113°8	109°2	105°4	102°6	100°0	105°1	104°8
117°2	117°0	116°2	118°0	119°2	119°3	112°2	109°4	105°2	102°6	101°8	105°0	104°2
115°3	116°6	116°2	118°0	117°9	118°0	111°8	107°8	104°8	102°2	100°7	105°0	105°0
116°0	116°7	116°8	118°3	119°0	118°2	111°3	108°7	104°0	102°1	101°2	105°0	104°0
116°0	116°9	116°5	118°0	120°0	117°6	111°0	107°1	103°8	102°5	101°8	105°0	105°0
117°8	116°8	116°1	115°6	117°0	117°0	112°0	106°9	101°7	102°6	102°0	106°0	104°0

Force.

593°2	587°8
591°6	588°6
590°6	590°6
592°3	595°4
590°4	591°8
590°3	587°4
590°6	583°4
589°2	581°4
588°6	582°6
591°7	585°2
591°4	586°0
589°6	581°6
69°4	69°0

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

581°4	587°4	590°4	588°9	585°8	573°9	566°2	561°4	563°8	568°5	574°1	586°4	603°4
580°8	588°6	589°4	589°4	582°9	571°4	566°7	565°2	563°6	571°4	573°6	589°4	608°2
580°0	591°4	588°4	588°9	580°9	575°9	565°0	566°4	565°2	571°6	571°6	590°8	604°4
580°8	591°5	583°6	588°9	577°9	571°4	563°4	561°2	566°1	579°1	573°6	591°1	605°6
584°6	591°1	581°8	586°9	577°4	571°9	561°8	565°4	561°3	574°2	570°4	591°8	607°4
584°4	591°1	585°4	587°4	577°9	571°4	564°4	565°9	563°6	575°2	575°1	592°4	601°8
581°8	588°6	588°0	585°1	578°4	570°9	563°8	562°2	564°7	575°0	581°2	591°6	601°2
589°2	590°2	588°1	581°9	578°4	565°1	561°8	563°9	561°0	571°2	582°6	595°4	601°0
587°1	590°2	589°4	585°1	577°9	569°4	561°0	565°6	564°9	573°8	582°8	596°2	598°4
586°7	589°8	587°4	581°4	577°9	567°4	562°1	565°6	565°2	575°2	585°6	596°2	597°2
585°0	589°2	589°5	585°1	575°4	567°9	564°6	561°1	567°5	571°4	586°8	597°2	599°8
585°0	589°4	588°9	585°4	576°9	568°2	565°6	566°4	568°8	574°6	587°4	601°4	595°4
69°0	69°0	68°4	68°0	68°0	68°0	68°0	68°1	68°3	68°1	68°2	68°2	68°2

Force.

178°8	177°2
176°0	176°8
176°0	176°7
177°3	176°4
176°5	176°9
177°0	177°2
177°5	180°2
177°1	179°8
176°9	178°7
177°4	180°4
176°8	178°6
177°2	178°4
69°7	70°1

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

180°2	175°4	175°6	175°8	178°9	177°5	177°4	177°6	180°0	178°8	182°3	183°8	183°7
181°7	175°3	175°6	175°8	178°9	177°3	177°1	176°6	177°5	178°8	181°5	184°0	183°9
181°0	175°4	175°8	175°8	178°9	178°5	176°9	177°7	177°5	178°9	181°4	184°0	183°9
179°9	175°5	175°8	175°8	177°9	177°9	176°8	177°4	177°5	181°3	181°8	184°0	181°7
179°2	175°4	175°8	176°8	178°6	177°0	176°9	177°8	179°1	181°3	181°2	184°0	185°0
177°3	175°1	175°8	176°8	178°6	177°2	177°8	177°1	179°1	181°0	181°3	184°0	185°0
177°0	175°1	175°8	176°9	178°7	177°8	177°8	177°4	179°4	181°2	182°6	183°9	184°8
177°7	175°6	175°8	177°1	178°4	177°0	177°6	178°7	179°4	181°1	183°1	183°9	184°8
177°4	175°6	175°8	177°1	178°4	177°0	177°6	178°7	178°0	180°7	183°0	183°6	184°8
171°2	175°6	175°8	178°9	178°8	177°4	177°6	178°7	177°9	181°0	183°6	183°6	184°8
171°2	175°6	175°6	178°9	178°8	177°7	177°1	178°3	179°7	181°5	181°4	183°6	181°8
171°2	175°1	175°6	178°9	178°8	177°1	177°2	178°1	179°2	181°7	183°8	183°7	181°1
70°0	69°8	69°5	69°3	68°2	68°0	67°7	67°7	67°7	68°1	68°0	68°0	67°6

near Westly Declination.

early round the horizon.

early round the horizon.

early round the horizon.

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
21 22 0	29°557	59°9	59°3	—	Calm.	Generally clear.
23 0	29°577	59°8	59°0	—	Calm.	Generally clear.
21 0 0	29°599	59°9	58°8	N.W. by N.	Very light.	Cloudy.
1 0	29°611	63°9	62°4	N.W. by N.	Very light.	Cloudy; occasional rain.
2 0	29°609	61°8	62°3	N.	Very light.	Cloudy; cir.-cum. and cir.-strat.
3 0	29°616	61°6	63°5	W.S.W.	Very light.	Cloudy; cir.-cum. and cir.-strat.
4 0	29°618	61°8	63°9	W. by S.	Very light.	Cloudy; occasional rain.
5 0	29°611	61°8	64°0	W. by S.	Very light.	Cloudy; occasional rain.
6 0	29°619	66°1	65°1	—	Calm.	Cloudy and rainy.
7 0	29°627	65°6	64°5	N. by W.	Light.	Cloudy with rain.
8 0	29°629	61°7	59°9	N. by W.	Moderate.	Cloudy; cir.-cum. and cir.-strat.
9 0	29°629	62°1	59°4	N.E. by N.	Very light.	Cloudy; occasional rain.

October 21st and 22nd,		MAGNETICAL OBSERVATIONS.												
Mean Gottingen Time.		Angular Value of One Scale Division = 0".721.										DECLINATION.		
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .		
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	108.9	114.0	113.9	112.0	113.9	113.3	133.6	124.2	111.0	111.2	113.2		
5	0	108.0	113.1	114.0	112.0	113.2	115.0	131.0	123.0	112.7	111.3	111.2		
10	0	109.2	112.0	111.2	112.3	113.1	115.0	128.0	120.2	113.0	111.2	111.2		
15	0	109.8	111.0	113.1	112.0	113.5	116.3	124.1	119.2	113.4	111.8	111.0		
20	0	109.8	110.3	111.0	112.2	113.9	117.2	122.0	117.4	112.8	112.0	111.4		
25	0	110.5	109.9	110.2	112.7	114.0	117.1	121.4	115.6	112.2	112.8	111.8		
30	0	111.0	112.0	111.0	113.1	113.1	119.0	121.0	115.8	112.7	113.2	113.0		
35	0	111.0	106.0	111.2	113.2	112.2	119.7	119.7	116.2	113.0	113.2	113.4		
40	0	111.0	103.8	111.2	113.6	111.7	123.8	123.2	117.0	113.2	113.2	114.2		
45	0	111.7	104.2	111.3	113.6	111.0	121.8	124.6	116.0	112.7	113.4	114.5		
50	0	112.8	109.8	111.1	113.0	110.9	128.0	125.0	113.3	112.4	113.4	113.8		
55	0	114.1	112.4	111.4	113.3	111.1	131.0	125.7	112.0	112.0	113.2	114.5		
M.		One Scale Division = .00087.										HORIZONTAL FORCE.		
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .		
0	0	629.0	613.0	605.0	619.0	619.0	604.5	590.0	591.4	611.0	610.0	614.2		
5	0	626.0	615.0	607.0	619.0	618.0	601.0	599.5	596.0	611.7	610.3	616.2		
10	0	625.0	617.0	611.0	619.0	618.0	597.5	598.0	598.8	610.2	609.1	614.4		
15	0	618.0	614.0	614.4	619.0	619.0	594.0	598.0	602.0	610.4	610.0	612.0		
20	0	614.8	614.6	616.6	618.0	619.0	591.0	597.0	602.6	611.2	608.0	612.4		
25	0	613.0	611.0	616.8	617.0	619.0	589.0	596.2	602.8	611.7	607.4	611.8		
30	0	614.5	611.8	616.8	618.0	620.0	588.2	593.3	603.0	612.3	607.4	612.0		
35	0	617.8	612.0	617.8	617.1	618.0	591.0	587.6	602.8	610.2	607.4	613.2		
40	0	620.0	606.0	617.7	617.0	615.0	595.0	585.8	607.2	612.0	610.2	612.4		
45	0	616.0	606.0	618.8	616.1	612.3	592.0	588.0	610.0	612.4	612.2	611.8		
50	0	618.4	601.8	620.0	616.9	610.0	593.0	591.2	612.0	611.0	612.8	612.2		
55	0	616.5	601.2	620.1	618.0	608.0	592.0	591.6	612.4	611.4	610.5	612.2		
Thermometer		53.5	53.7	54.0	54.1	54.5	55.0	54.7	54.3	54.0	53.7	54.0		
M.		One Scale Division = .000063.										VERTICAL FORCE.		
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .		
0	0	206.2	207.0	206.3	204.4	204.2	203.9	204.3	205.1	201.4	204.8	203.6		
5	0	205.9	207.0	206.3	204.5	204.2	204.7	204.3	205.0	201.5	204.7	203.6		
10	0	205.7	207.6	206.8	204.7	204.2	204.7	202.4	205.3	202.1	205.7	203.6		
15	0	205.4	207.6	206.8	204.7	204.2	205.5	201.7	206.1	202.2	205.1	203.6		
20	0	205.9	207.6	206.8	204.2	204.2	205.5	201.7	205.4	204.6	204.1	203.3		
25	0	204.3	206.7	205.5	204.2	204.2	205.2	201.6	205.4	204.1	203.2	203.3		
30	0	204.3	206.7	205.5	204.2	204.8	206.2	201.3	205.5	204.0	203.1	203.1		
35	0	204.7	206.7	205.3	204.2	204.8	206.2	201.3	203.1	205.1	203.4	203.1		
40	0	204.7	206.7	205.3	204.2	204.8	206.5	201.6	202.3	205.0	203.4	203.9		
45	0	204.7	206.7	204.7	204.2	204.8	204.6	203.9	201.7	205.0	203.4	203.9		
50	0	206.5	207.7	204.7	204.2	204.8	205.4	203.8	201.4	204.8	203.4	203.9		
55	0	206.5	207.7	204.7	204.2	204.8	205.4	205.0	201.5	204.7	203.6	203.9		
Thermometer		53.5	53.2	54.2	54.4	54.4	55.2	55.2	55.0	54.5	54.2	54.6		

Increasing Numbers denote decreasing westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Gottingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
21	10	0	29.756	40.2	37.2	W. by S.	Light.	Generally clouded; cir.-cum. and cir.-strat.			
	11	0	29.754	39.7	37.0	—	Calm.	Generally clouded; cir.-cum. and cir.-strat.			
	12	0	29.770	38.9	36.5	W.	Very light.	Clouded; cir.-cum. and cir.-strat.			
	13	0	29.793	38.1	35.3	W. by S.	Very light.	Cloudy; cir.-cum. and strat.			
	14	0	29.772	35.5	33.4	W. by S.	Very light.	Cloudy; cir.-cum. and cir.-strat.			
	15	0	29.779	36.1	33.9	W.S.W.	Very light.	Cloudy; fine.			
	16	0	29.765	37.1	34.6	W.S.W.	Very light.	Cloudy; cir.-cum. and strat.			
	17	0	29.783	36.9	34.0	W.S.W.	Very light.	Cloudy; fine; cir.-cum. and haze.			
	18	0	29.760	36.5	34.0	W.S.W.	Very light.	Cloudy; cir.-cum. and cir.-strat.			
	19	0	29.752	36.5	34.0	W.S.W.	Very light.	Cloudy; cir.-cum. and cir.-strat.			
	20	0	29.712	36.9	34.4	W.S.W.	Very light.	Cloudy; cir.-cum. and strat.			
	21	0	29.676	37.3	35.0	W.S.W.	Very light.	Cloudy; fine, with haze.			

\* At 22° 10', Thermometer of H. F., 52° 1'; of V. F., 52° 3'.

MAGNETICAL OBSERVATIONS.													October 21st and 22nd.	
DECLINATION.													Angular Value of one Scale Division = 0°.721.	
21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
115°2	106°2	110°2	116°3	119°1	114°0	108°7	114°0	110°2	108°8	103°0	103°5	103°5	107°6	107°6
116°0	105°6	110°8	117°4	117°7	113°0	108°0	111°4	109°4	107°2	102°8	103°0	103°0	109°0	109°0
118°2	105°8	113°7	119°1	117°7	114°2	110°0	111°2	110°4	107°0	103°5	104°2	104°2	108°0	108°0
119°4	105°0	113°9	117°4	117°0	113°8	110°6	112°0	111°0	108°0	106°2	104°1	104°1	109°0	109°0
118°8	105°2	115°3	118°8	117°8	113°6	109°7	110°0	109°4	110°2	107°0	104°8	104°8	108°7	108°7
119°0	104°5	115°9	117°9	117°9	112°0	115°0	110°2	108°8	107°2	107°5	104°2	104°2	108°8	108°8
119°0	103°8	115°0	120°3	115°0	112°2	114°2	110°2	108°8	106°0	102°2	101°4	101°4	111°8	111°8
118°8	102°1	117°1	116°8	113°8	113°9	110°0	108°8	107°7	108°4	105°4	104°0	104°0	112°0	112°0
116°5	103°4	121°3	119°0	113°9	112°7	110°0	109°2	109°0	107°5	104°0	106°1	106°1	114°3	114°3
112°4	106°0	119°4	118°1	111°7	112°0	112°0	107°6	110°2	105°5	104°8	106°5	106°5	114°1	114°1
109°8	107°4	119°1	117°8	111°2	110°5	113°0	109°3	110°8	103°2	105°0	107°1	107°1	114°9	114°9
106°8	108°7	118°7	118°3	114°0	110°5	113°3	111°0	111°8	103°5	103°0	108°5	108°5	114°4	114°4

HORIZONTAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.	
610°4	591°6	620°6	620°2	618°2	599°0	591°0	581°0	581°3	587°0	585°6	595°3	618°8		
610°0	595°8	618°8	618°0	611°0	597°1	588°0	579°0	581°3	580°2	591°2	598°0	619°1		
609°4	593°4	620°7	619°1	615°5	595°8	587°5	581°0	581°0	578°0	591°2	599°2	621°4		
610°0	596°8	618°2	616°2	613°8	600°0	590°0	590°1	582°2	576°8	603°8	601°5	611°5		
608°0	596°2	618°5	618°0	612°8	602°0	585°5	590°2	580°3	574°0	601°2	603°0	611°8		
607°4	601°0	620°3	616°8	612°0	603°0	577°5	589°2	576°8	578°2	611°8	608°8	607°1		
607°4	597°5	616°2	619°1	612°0	605°1	583°0	592°0	572°0	578°0	599°6	604°8	610°2		
607°4	611°2	620°0	619°8	611°0	600°0	581°2	591°0	569°2	580°5	598°2	605°0	614°2		
610°2	613°4	621°2	618°8	610°2	585°0	585°6	593°8	571°0	583°8	596°5	608°2	614°0		
612°2	616°1	622°2	618°7	606°5	597°0	591°5	589°4	573°2	586°0	591°7	611°2	611°8		
612°8	619°0	622°6	619°1	601°2	595°0	593°6	587°0	575°8	585°6	599°5	616°2	616°4		
610°6	620°2	621°8	617°5	601°0	596°0	589°2	587°4	577°4	583°4	597°2	618°8	616°5		
53°7	54°0	54°2	54°0	53°6	52°7	53°0	53°0	53°0	52°8	52°6	52°1	52°1 <sup>a</sup>		

VERTICAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.	
203°4	186°7	193°0	197°7	200°4	200°9	202°5	202°7	201°8	211°4	202°6	207°2	208°7		
201°9	184°9	191°0	198°0	200°6	200°9	202°5	202°7	202°0	211°6	202°6	208°5	209°7		
205°7	181°2	191°8	198°5	199°6	200°7	203°2	203°1	202°2	212°4	205°2	207°4	209°7		
205°1	185°1	191°1	197°7	199°0	200°7	203°2	204°6	201°6	211°0	208°9	208°3	209°0		
204°1	184°2	195°4	198°9	199°0	201°1	202°4	201°4	203°1	210°3	208°8	207°5	209°0		
203°2	187°7	196°2	199°5	199°0	201°9	201°0	203°2	203°9	211°3	209°8	209°1	208°7		
203°1	189°7	196°2	200°0	201°4	201°0	202°9	202°7	204°5	211°3	208°6	207°8	210°2		
203°4	191°5	197°0	200°5	201°3	201°5	201°0	202°6	204°6	210°4	207°5	208°4	211°7		
203°1	196°9	197°3	201°9	201°3	203°5	203°9	203°1	206°5	210°1	207°5	208°0	210°8		
203°4	193°0	197°3	203°2	201°3	204°2	204°8	202°6	207°1	209°5	207°5	208°8	209°9		
203°4	193°0	196°6	203°0	201°4	203°2	203°1	202°6	208°5	209°1	208°3	208°7	210°5		
203°6	189°7	193°0	197°5	200°6	201°4	201°1	202°7	202°0	209°4	207°5	208°3	210°0		
54°2	54°6	54°7	55°7	55°0	53°3	53°4	53°3	53°8	53°2	53°0	52°6	52°4 <sup>a</sup>		

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.			Weather.		
P.	H.	M.	In.	Dry.	Wet.	Direction.	Force.					
21	22	0	29°644	38°1	35°7	S.W.	Moderate.		Cloudy; fine, with haze.			
	23	0	29°617	38°1	35°9	S.S.W.	Moderate.		Cloudy; fine, with haze.			
22	0	0	29°587	37°9	36°1	S.S.W.	Nearly calm.		Generally cloudy.			
	1	0	29°581	37°7	35°9	S.S.W.	Nearly calm.		Generally cloudy.			
	2	0	29°557	37°9	36°3	S.S.W.	Nearly calm.		Cloudy, but fine.			
	3	0	29°538	37°9	36°8	W.S.W.	Nearly calm.		Cloudy; fine; cir.-cum. and haze.			
	4	0	29°538	38°1	36°2	N. by W.	Moderate.		Cloudy; fine; cir.-cum. and haze.			
	5	0	29°587	38°1	35°5	N. by W.	Brisk, with gusts.		Generally clouded.			
	6	0	29°609	37°3	34°6	N. by W.	Brisk, with gusts.		Cloudy, with haze.			
	7	0	29°638	38°1	33°8	N. by W.	Brisk, with gusts.		Cloudy, with cir. and haze.			
	8	0	29°674	37°3	33°8	N.	Brisk, with gusts.		Cloudy; cir.-cum. and haze.			
	9	0	29°726	35°5	32°6	N.	Brisk, with gusts.		Cloudy; cir.-cum. and haze.			

November 27th and 28th.		MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.	
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.
0	0	112°0	110°0	107°2	110°0	118°2	117°2	120°0	116°5	116°2	110°1	109°2	109°2
5	0	112°2	110°0	111°2	110°3	117°0	118°8	120°3	116°2	114°6	110°8	109°0	109°0
10	0	112°2	108°8	110°3	115°6	116°0	119°7	118°4	115°3	115°0	112°0	109°5	109°5
15	0	111°4	110°2	113°3	112°4	117°1	119°1	115°9	115°0	111°1	113°8	111°1	111°1
20	0	110°0	109°8	112°6	112°0	116°7	120°0	115°3	111°7	113°9	114°0	110°9	110°9
25	0	111°2	110°0	113°0	116°8	115°2	120°2	115°4	111°1	113°6	113°2	108°7	111°1
30	0	110°3	110°0	111°3	114°8	113°8	122°5	115°2	113°9	113°2	113°8	108°0	111°1
35	0	111°0	110°0	112°0	115°1	113°2	116°2	115°7	111°6	112°8	112°7	109°0	111°1
40	0	111°2	111°7	115°0	116°2	113°3	121°2	115°1	111°4	111°3	112°5	109°6	111°1
45	0	111°0	112°4	117°2	117°0	115°0	121°8	111°9	115°0	110°0	112°8	107°8	111°1
50	0	110°2	112°2	121°2	121°3	115°0	117°0	115°0	115°2	109°6	112°1	108°7	109°0
55	0	110°0	110°7	127°2	122°0	116°3	114°4	115°3	115°9	110°4	111°2	109°0	110°0

M.		One Scale Division = 000087 parts of the H. F.										HORIZONTAL FORCE.	
S.		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
0	0	637°0	636°0	619°0	622°2	628°4	620°1	611°4	622°2	626°2	621°0	628°0	
5	0	637°2	636°2	619°8	631°2	625°8	622°2	613°4	623°5	625°2	623°2	627°5	
10	0	637°0	632°0	619°7	628°4	622°2	622°3	616°0	625°2	625°0	624°0	621°5	
15	0	641°2	631°2	617°0	637°0	621°0	620°2	611°0	625°2	626°6	624°0	622°0	
20	0	642°0	631°6	618°3	637°2	622°2	620°4	610°8	626°2	626°1	621°0	620°0	
25	0	641°2	629°2	616°4	636°2	621°8	632°6	635°0	627°8	625°2	623°0	618°0	
30	0	638°6	627°4	615°3	635°0	625°7	612°8	632°2	626°0	625°0	625°0	618°2	
35	0	638°0	624°8	615°0	635°4	626°0	615°8	631°6	625°2	627°2	625°0	621°8	
40	0	638°3	623°0	617°5	632°2	625°6	610°5	628°5	625°0	628°0	626°8	625°0	
45	0	639°1	622°2	618°2	630°8	620°2	610°8	621°0	623°2	625°2	628°8	623°0	
50	0	637°0	622°2	616°2	631°1	620°8	638°2	621°6	623°2	621°2	630°0	622°0	
55	0	635°2	620°8	616°0	630°0	620°0	631°2	620°8	623°5	624°0	631°2	621°8	

Thermometer		42°7	43°0	44°0	44°2	44°4	44°8	45°6	46°4	46°8	46°2	46°5	
M.	S.	One Scale Division = 000063 parts of the V. F.										VERTICAL FORCE.	
0	0	221°1	218°0	216°2	218°2	215°4	212°8	201°4	205°4	207°4	205°7	201°6	
5	0	220°6	218°4	216°2	217°4	215°4	212°0	202°7	205°8	207°1	201°9	201°6	
10	0	220°1	218°6	214°2	216°7	215°6	210°8	202°3	206°8	207°5	204°7	201°6	
15	0	220°3	216°4	215°1	216°7	215°7	209°6	201°2	209°7	208°2	201°6	201°6	
20	0	220°4	216°3	215°1	218°1	215°7	208°2	201°2	206°6	206°7	201°6	204°6	
25	0	220°4	216°3	216°6	215°3	215°3	209°6	200°7	203°6	206°7	201°6	204°1	
30	0	220°2	216°2	216°4	215°3	215°3	205°0	201°1	206°2	208°0	201°6	203°1	
35	0	220°8	215°7	218°1	215°0	215°3	205°3	201°8	206°5	208°9	201°9	203°3	
40	0	220°5	215°6	218°3	215°0	214°6	200°9	202°5	206°0	206°9	201°9	203°2	
45	0	221°4	216°2	218°7	215°0	211°6	200°8	202°9	206°0	207°1	201°9	202°6	
50	0	221°1	216°2	218°0	215°4	211°1	200°8	201°0	205°6	206°2	205°6	202°6	
55	0	218°1	217°4	218°0	215°4	213°3	198°5	201°8	206°4	206°1	205°5	202°6	

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.												
Mean Gottingen Time.			Barometer at 32°.			Thermometers.		Wind.		Weather.		
			In.	o	o	Dry.	Wet.	Direction.	Force.			
27	10	0	29°429	33°7	30°7	S.E. by S.	Light.	Cloudy; cum-strat. and cir. cum.				
	11	0	29°395	31°7	31°7	S.E. by S.	Moderate, with gusts.	Cloudy; cum-strat.				
	12	0	29°367	36°1	31°8	S.S.W.	Brisk.	Cloudy; fine.				
	13	0	29°373	36°1	32°7	S.S.W.	Fresh.	Cloudy; fine.				
	14	0	29°361	35°2	32°9	S.S.W.	Brisk, with gusts.	Cloudy; fine.				
	15	0	29°359	35°2	33°0	S.W.	Brisk.	Cloudy, with haze.				
	16	0	29°356	34°1	32°9	S.W.	Moderate, with gusts.	Cloudy mist and rain.				
	17	0	29°334	34°9	34°9	S.W.	Light.	Cloudy, with rain.				
	18	0	29°337	35°7	34°7	S.W.	Very light.	Cloudy; mist and rain.				
	19	0	29°326	35°6	34°6	—	Calm.	Mist, and occasional rain.				
	20	0	29°338	35°3	34°4	—	Calm.	Cloudy, with showers of rain.				
	21	0	29°331	35°4	34°5	—	Calm.	Cloudy, with rain.				

\* At 28° 10', Thermometer of H. F., 51° 51 of V. F., 51° 2.

MAGNETICAL OBSERVATIONS.

November 27th and 28th.

DECLINATION.

Angular Value of one Scale Division = 0".721.

19th.		20th.		21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
110°5	107°8	103°1	111°0	113°1	111°4	118°8	117°1	115°5	109°1	111°9	105°2	108°0	112°0	106°2	103°8	113°0
110°8	109°0	106°8	113°0	113°2	115°0	118°4	117°2	113°9	110°1	111°9	105°0	108°0	112°8	105°8	103°0	113°2
112°0	109°5	108°0	112°0	111°2	115°0	118°4	117°8	112°6	111°2	110°0	105°0	108°2	113°0	105°0	103°8	113°8
113°8	111°1	107°0	112°8	111°5	115°2	118°0	117°8	112°6	112°0	109°9	105°0	108°8	114°0	105°0	103°8	114°8
114°0	110°9	109°3	112°0	116°0	115°0	117°6	116°2	112°0	112°2	108°9	105°0	108°4	114°8	105°0	103°8	115°6
113°2	108°7	110°0	111°0	111°4	113°8	118°8	117°8	111°0	112°2	108°4	107°0	108°0	115°6	105°0	103°8	116°4
113°8	108°0	109°0	111°7	111°0	116°0	118°8	118°0	112°8	119°9	107°1	105°5	109°0	116°4	105°0	103°8	117°2
112°7	109°0	109°8	109°0	111°6	112°1	118°8	115°3	113°5	112°8	108°9	107°6	108°8	117°2	105°0	103°8	117°8
112°5	109°6	109°0	113°0	111°0	116°0	118°0	116°1	111°8	111°1	107°2	105°9	108°2	118°0	105°0	103°8	118°4
112°8	107°8	108°8	111°0	113°2	116°0	118°7	117°2	110°0	112°8	105°0	105°8	108°8	118°4	105°0	103°8	119°0
112°1	108°7	111°4	111°8	111°0	117°2	117°6	111°2	109°1	113°0	106°0	108°0	108°7	119°0	105°0	103°8	119°6
111°2	109°0	111°0	111°0	113°8	118°5	118°1	115°1	109°5	112°0	105°2	107°8	109°7	120°0	105°0	103°8	120°2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°61.

621°0	628°0	611°1	631°5	631°0	626°0	621°2	617°9	611°0	601°0	611°5	611°0	607°5	621°5	627°5	611°0	612°0
623°0	621°5	629°5	637°0	632°5	623°2	623°3	617°1	611°5	604°2	611°0	610°1	612°0	623°0	621°5	610°8	607°5
623°0	621°5	631°0	637°0	631°6	623°4	622°0	619°6	615°0	605°0	610°8	607°5	613°0	624°0	622°0	611°0	606°0
624°0	620°0	629°5	631°2	632°0	622°2	621°5	618°8	610°2	608°0	611°0	606°0	614°0	624°0	620°0	610°0	605°0
623°0	618°0	628°2	631°5	632°6	621°1	620°2	613°5	603°2	607°2	609°0	605°8	612°0	625°0	618°0	609°0	604°0
625°0	618°2	631°0	632°5	631°3	621°3	621°2	617°2	615°2	606°3	606°1	612°0	612°5	626°0	618°2	610°0	606°1
626°8	625°0	631°2	631°0	628°2	621°2	621°1	619°3	608°2	603°0	609°0	612°0	616°1	627°0	624°8	611°0	611°5
628°8	623°0	631°0	630°0	628°7	620°2	620°4	615°1	611°0	601°5	609°0	611°0	613°5	628°0	623°0	610°0	615°5
630°0	622°0	631°0	630°0	628°0	621°0	620°0	620°7	617°0	608°2	612°0	609°2	615°0	630°0	622°0	610°0	615°5
631°2	626°0	631°0	630°0	626°2	623°2	620°4	611°2	613°2	609°2	611°4	608°0	615°5	631°2	626°0	610°0	615°5
630°0	628°0	631°0	630°5	623°0	623°6	620°8	613°8	603°5	610°0	608°2	607°3	618°0	630°0	628°0	610°0	615°5
631°2	621°8	631°0	631°0	623°6	623°0	618°5	615°2	606°2	608°0	611°0	610°5	620°0	631°2	621°8	610°0	615°5

16°2	16°5	16°8	18°1	18°9	19°4	19°4	19°6	19°6	19°6	19°8	19°9	50°5	51°2
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature 1°61.

205°7	201°6	198°8	198°4	201°0	202°1	200°5	200°0	202°2	202°8	203°1	205°5	201°1	203°7
201°9	201°6	198°1	198°4	201°0	203°0	200°1	201°5	203°0	203°4	203°4	205°9	204°1	203°7
204°7	201°6	197°3	198°1	201°0	203°0	200°1	201°5	203°0	202°2	203°1	206°9	203°7	204°7
201°6	201°6	199°4	199°4	201°0	201°5	201°1	201°5	203°0	202°2	203°5	206°9	203°7	204°7
201°6	201°6	197°3	197°8	201°0	201°6	200°7	201°5	201°5	202°9	201°8	205°9	203°7	204°7
200°2	203°1	196°6	200°3	201°0	201°5	200°2	201°2	201°5	202°7	201°4	205°9	201°8	204°4
201°6	203°1	196°5	200°3	201°0	200°2	20°1	201°2	201°5	203°1	201°5	205°1	201°8	205°1
201°9	201°3	196°5	200°2	200°4	200°7	200°6	201°9	202°5	203°5	201°5	205°1	203°7	205°1
201°9	201°3	195°4	200°3	201°8	200°8	20°1	201°9	203°3	201°7	205°1	205°1	203°9	205°1
201°9	202°6	196°5	200°1	201°8	201°2	200°3	201°9	203°4	202°8	203°5	204°5	203°7	204°5
205°6	202°6	198°2	201°0	202°4	200°2	200°7	201°9	202°5	202°8	205°5	203°9	203°7	204°5
205°5	202°6	198°1	201°0	202°1	200°9	200°0	201°9	203°1	202°8	205°5	203°9	203°7	204°5

47°3	47°5	48°4	49°0	49°2	49°3	49°2	50°5	50°5	49°5	49°1	49°8	49°4	50°0	50°6
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Gottagen Time.	Barometer at 32°	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.	°	°			
27 22 0	29°327	36°7	35°9	—	Calm.	Cloudy; cum-strat. and cir-cum.
23 0 0	29°329	37°3	36°2	—	Calm.	Cloudy, with haze.
28 0 0	29°350	37°3	36°2	—	Calm.	Cloudy; cir-cum. and strat.
1 0 0	29°366	36°9	35°7	—	Calm.	Cloudy; cir-cum. and strat.
2 0 0	29°391	38°3	36°0	S.W.	Light.	Cloudy; cir-strat.
3 0 0	29°437	38°0	35°8	S.W. by W.	Very light.	Cloudy; cir-strat. and haze.
4 0 0	29°475	38°5	36°5	S.W. by W.	Very light.	Cloudy, with haze.
5 0 0	29°483	40°3	37°7	S.W. by W.	Light.	Cloudy; cir-cum. and strat.
6 0 0	29°498	41°9	37°9	W. by S.	Light.	Cloudy, with cir-cum.
7 0 0	29°506	43°0	38°6	W.S.W.	Light.	Clear; cir-strat.
8 0 0	29°514	43°7	39°1	W.S.W.	Brisk.	Clear; cir-strat.
9 0 0	29°521	42°6	38°1	W.S.W.	Moderate, with gusts.	Cloudy; cir-strat.

December 23rd and 24th.			MAGNETICAL OBSERVATIONS.											
Mean Gottingen Time.			Angular Value of one Scale division = 0721.						DECLINATION.					
			10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.	Sec. Div.
0	0	107 <sup>o</sup> 0	107 <sup>o</sup> 5	110 <sup>o</sup> 1	104 <sup>o</sup> 0	123 <sup>o</sup> 9	123 <sup>o</sup> 8	122 <sup>o</sup> 7	118 <sup>o</sup> 2	114 <sup>o</sup> 0	113 <sup>o</sup> 2	113 <sup>o</sup> 2	116 <sup>o</sup> 7	
5	0	109 <sup>o</sup> 2	109 <sup>o</sup> 2	110 <sup>o</sup> 3	108 <sup>o</sup> 0	123 <sup>o</sup> 8	122 <sup>o</sup> 0	121 <sup>o</sup> 7	118 <sup>o</sup> 0	113 <sup>o</sup> 2	113 <sup>o</sup> 3	113 <sup>o</sup> 3	116 <sup>o</sup> 4	
10	0	113 <sup>o</sup> 8	108 <sup>o</sup> 1	111 <sup>o</sup> 1	102 <sup>o</sup> 0	125 <sup>o</sup> 8	122 <sup>o</sup> 2	120 <sup>o</sup> 0	119 <sup>o</sup> 0	113 <sup>o</sup> 4	114 <sup>o</sup> 0	114 <sup>o</sup> 0	116 <sup>o</sup> 6	
15	0	117 <sup>o</sup> 6	107 <sup>o</sup> 0	113 <sup>o</sup> 8	101 <sup>o</sup> 2	127 <sup>o</sup> 1	123 <sup>o</sup> 6	120 <sup>o</sup> 2	117 <sup>o</sup> 3	113 <sup>o</sup> 9	114 <sup>o</sup> 2	114 <sup>o</sup> 2	116 <sup>o</sup> 0	
20	0	120 <sup>o</sup> 1	104 <sup>o</sup> 7	115 <sup>o</sup> 2	101 <sup>o</sup> 5	125 <sup>o</sup> 8	128 <sup>o</sup> 0	123 <sup>o</sup> 0	115 <sup>o</sup> 0	113 <sup>o</sup> 9	114 <sup>o</sup> 3	114 <sup>o</sup> 3	116 <sup>o</sup> 2	
25	0	122 <sup>o</sup> 9	105 <sup>o</sup> 3	115 <sup>o</sup> 7	100 <sup>o</sup> 9	124 <sup>o</sup> 8	130 <sup>o</sup> 0	123 <sup>o</sup> 0	115 <sup>o</sup> 4	113 <sup>o</sup> 5	114 <sup>o</sup> 4	114 <sup>o</sup> 4	116 <sup>o</sup> 4	
30	0	125 <sup>o</sup> 1	105 <sup>o</sup> 8	116 <sup>o</sup> 1	111 <sup>o</sup> 1	121 <sup>o</sup> 0	128 <sup>o</sup> 8	121 <sup>o</sup> 2	115 <sup>o</sup> 2	114 <sup>o</sup> 0	115 <sup>o</sup> 2	115 <sup>o</sup> 2	116 <sup>o</sup> 4	
35	0	127 <sup>o</sup> 3	105 <sup>o</sup> 3	115 <sup>o</sup> 1	108 <sup>o</sup> 7	121 <sup>o</sup> 0	129 <sup>o</sup> 4	119 <sup>o</sup> 0	115 <sup>o</sup> 0	113 <sup>o</sup> 9	115 <sup>o</sup> 2	115 <sup>o</sup> 2	116 <sup>o</sup> 3	
40	0	123 <sup>o</sup> 0	107 <sup>o</sup> 1	114 <sup>o</sup> 2	104 <sup>o</sup> 3	125 <sup>o</sup> 8	131 <sup>o</sup> 2	123 <sup>o</sup> 8	114 <sup>o</sup> 3	113 <sup>o</sup> 8	115 <sup>o</sup> 2	115 <sup>o</sup> 2	116 <sup>o</sup> 0	
45	0	119 <sup>o</sup> 8	109 <sup>o</sup> 0	116 <sup>o</sup> 3	106 <sup>o</sup> 2	126 <sup>o</sup> 0	131 <sup>o</sup> 8	123 <sup>o</sup> 2	114 <sup>o</sup> 8	114 <sup>o</sup> 1	115 <sup>o</sup> 8	115 <sup>o</sup> 8	116 <sup>o</sup> 2	
50	0	112 <sup>o</sup> 9	109 <sup>o</sup> 0	119 <sup>o</sup> 9	105 <sup>o</sup> 7	126 <sup>o</sup> 1	131 <sup>o</sup> 0	120 <sup>o</sup> 5	114 <sup>o</sup> 0	113 <sup>o</sup> 9	115 <sup>o</sup> 4	115 <sup>o</sup> 4	116 <sup>o</sup> 2	
55	0	110 <sup>o</sup> 0	108 <sup>o</sup> 8	127 <sup>o</sup> 0	122 <sup>o</sup> 0	126 <sup>o</sup> 3	125 <sup>o</sup> 0	120 <sup>o</sup> 3	113 <sup>o</sup> 9	113 <sup>o</sup> 2	116 <sup>o</sup> 2	115 <sup>o</sup> 8	115 <sup>o</sup> 8	

M.			One Scale Division = 000087.						HORIZONTAL FORCE.					
M.	S.													
0	0	623 <sup>o</sup> 0	631 <sup>o</sup> 1	629 <sup>o</sup> 0	587 <sup>o</sup> 0	611 <sup>o</sup> 0	617 <sup>o</sup> 5	623 <sup>o</sup> 0	545 <sup>o</sup> 0	636 <sup>o</sup> 5	636 <sup>o</sup> 5	633 <sup>o</sup> 0	634 <sup>o</sup>	634
5	0	623 <sup>o</sup> 0	629 <sup>o</sup> 7	627 <sup>o</sup> 6	592 <sup>o</sup> 0	611 <sup>o</sup> 0	615 <sup>o</sup> 2	619 <sup>o</sup> 5	631 <sup>o</sup> 5	636 <sup>o</sup> 0	636 <sup>o</sup> 1	633 <sup>o</sup> 4	633 <sup>o</sup> 4	634
10	0	620 <sup>o</sup> 8	635 <sup>o</sup> 0	628 <sup>o</sup> 0	588 <sup>o</sup> 0	614 <sup>o</sup> 1	615 <sup>o</sup> 0	616 <sup>o</sup> 0	634 <sup>o</sup> 0	634 <sup>o</sup> 0	626 <sup>o</sup> 2	633 <sup>o</sup> 6	633 <sup>o</sup> 6	631
15	0	620 <sup>o</sup> 0	635 <sup>o</sup> 1	627 <sup>o</sup> 9	585 <sup>o</sup> 5	615 <sup>o</sup> 0	616 <sup>o</sup> 0	620 <sup>o</sup> 0	637 <sup>o</sup> 0	636 <sup>o</sup> 5	636 <sup>o</sup> 0	633 <sup>o</sup> 8	633 <sup>o</sup> 8	630
20	0	622 <sup>o</sup> 8	631 <sup>o</sup> 0	627 <sup>o</sup> 8	593 <sup>o</sup> 7	618 <sup>o</sup> 1	614 <sup>o</sup> 8	626 <sup>o</sup> 0	638 <sup>o</sup> 0	638 <sup>o</sup> 0	635 <sup>o</sup> 2	633 <sup>o</sup> 7	633 <sup>o</sup> 7	630
25	0	628 <sup>o</sup> 8	631 <sup>o</sup> 8	627 <sup>o</sup> 0	601 <sup>o</sup> 9	620 <sup>o</sup> 0	617 <sup>o</sup> 0	634 <sup>o</sup> 0	637 <sup>o</sup> 0	637 <sup>o</sup> 0	634 <sup>o</sup> 6	635 <sup>o</sup> 0	635 <sup>o</sup> 0	631
30	0	626 <sup>o</sup> 1	633 <sup>o</sup> 6	626 <sup>o</sup> 9	619 <sup>o</sup> 0	625 <sup>o</sup> 0	618 <sup>o</sup> 0	636 <sup>o</sup> 5	635 <sup>o</sup> 0	638 <sup>o</sup> 0	634 <sup>o</sup> 4	634 <sup>o</sup> 6	634 <sup>o</sup> 6	631
35	0	626 <sup>o</sup> 5	631 <sup>o</sup> 6	626 <sup>o</sup> 8	620 <sup>o</sup> 0	627 <sup>o</sup> 2	619 <sup>o</sup> 0	631 <sup>o</sup> 0	636 <sup>o</sup> 0	637 <sup>o</sup> 0	635 <sup>o</sup> 0	635 <sup>o</sup> 0	635 <sup>o</sup> 0	631
40	0	628 <sup>o</sup> 2	631 <sup>o</sup> 1	621 <sup>o</sup> 6	618 <sup>o</sup> 1	623 <sup>o</sup> 0	621 <sup>o</sup> 0	636 <sup>o</sup> 0	637 <sup>o</sup> 0	636 <sup>o</sup> 0	635 <sup>o</sup> 2	633 <sup>o</sup> 2	633 <sup>o</sup> 2	630
45	0	631 <sup>o</sup> 1	631 <sup>o</sup> 5	610 <sup>o</sup> 2	616 <sup>o</sup> 0	622 <sup>o</sup> 5	621 <sup>o</sup> 1	640 <sup>o</sup> 0	638 <sup>o</sup> 0	637 <sup>o</sup> 0	635 <sup>o</sup> 0	633 <sup>o</sup> 0	633 <sup>o</sup> 0	629
50	0	629 <sup>o</sup> 0	631 <sup>o</sup> 7	601 <sup>o</sup> 0	617 <sup>o</sup> 2	621 <sup>o</sup> 8	623 <sup>o</sup> 0	637 <sup>o</sup> 5	637 <sup>o</sup> 0	637 <sup>o</sup> 2	635 <sup>o</sup> 0	631 <sup>o</sup> 2	631 <sup>o</sup> 2	631
55	0	629 <sup>o</sup> 0	630 <sup>o</sup> 0	591 <sup>o</sup> 0	615 <sup>o</sup> 0	618 <sup>o</sup> 2	625 <sup>o</sup> 0	641 <sup>o</sup> 0	636 <sup>o</sup> 5	637 <sup>o</sup> 0	634 <sup>o</sup> 7	631 <sup>o</sup> 2	631 <sup>o</sup> 2	631

Thermometer		41 <sup>o</sup> 3	41 <sup>o</sup> 3	42 <sup>o</sup> 0	41 <sup>o</sup> 8	41 <sup>o</sup> 1	41 <sup>o</sup> 6	42 <sup>o</sup> 0	42 <sup>o</sup> 1	42 <sup>o</sup> 0	42 <sup>o</sup> 0	42 <sup>o</sup> 3	
M.	S.	One Scale Division = 0000063.						VERTICAL FORCE.					
0	0	219 <sup>o</sup> 6	218 <sup>o</sup> 1	217 <sup>o</sup> 1	222 <sup>o</sup> 0	215 <sup>o</sup> 8	215 <sup>o</sup> 2	213 <sup>o</sup> 0	198 <sup>o</sup> 9	208 <sup>o</sup> 0	209 <sup>o</sup> 1	206 <sup>o</sup> 9	
5	0	220 <sup>o</sup> 2	218 <sup>o</sup> 2	217 <sup>o</sup> 2	222 <sup>o</sup> 7	215 <sup>o</sup> 6	215 <sup>o</sup> 3	211 <sup>o</sup> 4	200 <sup>o</sup> 1	208 <sup>o</sup> 0	209 <sup>o</sup> 1	207 <sup>o</sup> 1	
10	0	219 <sup>o</sup> 8	218 <sup>o</sup> 0	216 <sup>o</sup> 9	219 <sup>o</sup> 1	219 <sup>o</sup> 7	215 <sup>o</sup> 5	210 <sup>o</sup> 2	200 <sup>o</sup> 8	208 <sup>o</sup> 0	207 <sup>o</sup> 8	207 <sup>o</sup> 3	
15	0	219 <sup>o</sup> 8	218 <sup>o</sup> 0	216 <sup>o</sup> 6	218 <sup>o</sup> 6	219 <sup>o</sup> 7	215 <sup>o</sup> 5	208 <sup>o</sup> 0	201 <sup>o</sup> 3	209 <sup>o</sup> 2	207 <sup>o</sup> 7	207 <sup>o</sup> 2	
20	0	219 <sup>o</sup> 1	218 <sup>o</sup> 3	216 <sup>o</sup> 5	219 <sup>o</sup> 0	220 <sup>o</sup> 6	215 <sup>o</sup> 3	204 <sup>o</sup> 8	202 <sup>o</sup> 1	209 <sup>o</sup> 2	207 <sup>o</sup> 6	207 <sup>o</sup> 3	
25	0	219 <sup>o</sup> 9	218 <sup>o</sup> 3	216 <sup>o</sup> 0	219 <sup>o</sup> 3	220 <sup>o</sup> 9	215 <sup>o</sup> 3	204 <sup>o</sup> 6	202 <sup>o</sup> 8	209 <sup>o</sup> 2	207 <sup>o</sup> 8	207 <sup>o</sup> 3	
30	0	219 <sup>o</sup> 0	217 <sup>o</sup> 4	216 <sup>o</sup> 0	220 <sup>o</sup> 8	219 <sup>o</sup> 9	214 <sup>o</sup> 0	201 <sup>o</sup> 8	203 <sup>o</sup> 0	209 <sup>o</sup> 2	207 <sup>o</sup> 7	207 <sup>o</sup> 4	
35	0	218 <sup>o</sup> 4	218 <sup>o</sup> 6	216 <sup>o</sup> 0	219 <sup>o</sup> 1	219 <sup>o</sup> 9	214 <sup>o</sup> 1	203 <sup>o</sup> 4	205 <sup>o</sup> 3	209 <sup>o</sup> 2	207 <sup>o</sup> 4	207 <sup>o</sup> 4	
40	0	218 <sup>o</sup> 6	218 <sup>o</sup> 3	216 <sup>o</sup> 3	215 <sup>o</sup> 9	219 <sup>o</sup> 9	214 <sup>o</sup> 0	202 <sup>o</sup> 7	206 <sup>o</sup> 0	209 <sup>o</sup> 2	207 <sup>o</sup> 5	207 <sup>o</sup> 0	
45	0	218 <sup>o</sup> 6	217 <sup>o</sup> 7	217 <sup>o</sup> 1	215 <sup>o</sup> 8	216 <sup>o</sup> 2	214 <sup>o</sup> 0	201 <sup>o</sup> 1	206 <sup>o</sup> 8	209 <sup>o</sup> 4	207 <sup>o</sup> 6	207 <sup>o</sup> 0	
50	0	218 <sup>o</sup> 5	218 <sup>o</sup> 0	220 <sup>o</sup> 1	215 <sup>o</sup> 8	215 <sup>o</sup> 5	214 <sup>o</sup> 0	200 <sup>o</sup> 2	206 <sup>o</sup> 8	209 <sup>o</sup> 2	207 <sup>o</sup> 5	207 <sup>o</sup> 1	
55	0	218 <sup>o</sup> 5	217 <sup>o</sup> 3	221 <sup>o</sup> 0	215 <sup>o</sup> 8	215 <sup>o</sup> 5	214 <sup>o</sup> 1	206 <sup>o</sup> 2	208 <sup>o</sup> 0	209 <sup>o</sup> 2	207 <sup>o</sup> 3	207 <sup>o</sup> 0	

Increasing numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Gottingen Time.			Barometer at 32 <sup>o</sup> .	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	h.	o.	o.						
23	10	0	30 <sup>o</sup> 184	21 <sup>o</sup> 9	21 <sup>o</sup> 4	--	Calm.	Cloudy; cir.-cum. and haze.			
	11	0	30 <sup>o</sup> 148	15 <sup>o</sup> 8	15 <sup>o</sup> 7	--	Calm.	Cloudy; cir.-cum.			
	12	0	30 <sup>o</sup> 155	13 <sup>o</sup> 7	13 <sup>o</sup> 4	--	Calm.	Cloudy; cir.-cum.			
	13	0	30 <sup>o</sup> 157	17 <sup>o</sup> 6	16 <sup>o</sup> 9	--	Calm.	Cloudy; with haze.			
	14	0	30 <sup>o</sup> 146	16 <sup>o</sup> 7	16 <sup>o</sup> 4	--	Calm.	Cloudy; cir.-cum. and haze.			
	15	0	30 <sup>o</sup> 126	19 <sup>o</sup> 5	18 <sup>o</sup> 8	--	Calm.	Cloudy; with haze.			
	16	0	30 <sup>o</sup> 097	16 <sup>o</sup> 2	15 <sup>o</sup> 6	--	Calm.	Cloudy; cir.-cum.; aurora.			
	17	0	30 <sup>o</sup> 069	12 <sup>o</sup> 6	12 <sup>o</sup> 6	--	Calm.	Cloudy; cir.-cum. and haze; aurora visible.			
	18	0	30 <sup>o</sup> 035	13 <sup>o</sup> 7	13 <sup>o</sup> 6	--	Calm.	Cloudy; cir.-cum. and haze.			
	19	0	30 <sup>o</sup> 021	15 <sup>o</sup> 6	15 <sup>o</sup> 0	--	Calm.	Cloudy; with haze.			
	20	0	30 <sup>o</sup> 011	15 <sup>o</sup> 5	15 <sup>o</sup> 2	--	Calm.	Cloudy; with haze.			
	21	0	29 <sup>o</sup> 992	15 <sup>o</sup> 6	15 <sup>o</sup> 2	--	Calm.	Cloudy; cir.-cum. and haze.			

\* At 21<sup>h</sup> 10<sup>m</sup>, Thermometer of H. F., 44<sup>o</sup>8; of V. F., 44<sup>o</sup>5.





January 20th and 21st.			MAGNETICAL OBSERVATIONS.										
Mean Göttingen Time.			Angular Value of one Scale Division = 0.721.										
			DECLINATION.										
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.
M.	S.		sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.	sc. Div.
0	0		113.7	113.0	112.4	111.6	110.7	109.7	108.7	107.6	106.5	105.3	104.1
5	0		111.6	112.9	115.0	115.3	125.0	111.0	114.0	115.8	108.8	115.0	119.2
10	0		112.5	113.1	111.9	115.0	123.3	113.9	111.2	116.0	107.0	111.7	120.0
15	0		112.4	112.9	115.0	111.2	121.2	111.4	111.2	116.9	108.8	115.0	120.6
20	0		112.2	112.9	114.8	116.0	119.0	113.3	111.1	117.3	111.0	116.0	120.4
25	0		113.1	113.2	115.2	117.0	117.0	114.1	111.1	115.1	113.2	112.0	120.7
30	0		113.2	114.1	115.5	119.8	115.8	111.8	111.1	111.6	111.7	110.2	120.5
35	0		112.9	115.0	115.7	126.2	111.8	111.1	111.1	111.1	111.0	117.4	120.7
40	0		112.5	115.1	116.0	129.6	111.6	111.2	111.6	111.1	112.8	116.7	120.6
45	0		112.0	115.0	115.6	131.0	111.0	111.2	111.5	112.0	111.7	117.3	120.8
50	0		112.4	116.2	115.2	130.5	111.0	111.0	111.0	111.0	115.1	117.1	121.0
55	0		112.8	117.0	115.9	129.0	111.0	111.0	115.0	108.0	115.3	117.8	121.8
			One Scale Division = 0.00087 parts of the H. F.										
			HORIZONTAL FORCE.										
M.	S.		612.0	619.0	616.5	613.1	615.0	616.1	615.0	612.0	615.0	617.0	617.0
2	0		612.0	619.0	616.5	613.1	615.0	616.1	615.0	612.0	615.0	617.0	617.0
7	0		611.5	612.0	616.0	613.9	611.8	616.2	615.0	612.0	611.5	617.8	617.1
12	0		613.0	616.0	611.2	611.5	617.2	616.2	615.0	612.0	615.0	615.9	618.0
17	0		617.0	613.1	613.0	613.8	618.0	613.0	613.0	610.0	615.9	617.0	618.2
22	0		618.0	616.0	611.0	611.0	618.0	616.0	615.0	618.0	616.8	618.2	619.0
27	0		616.3	611.6	611.8	619.2	619.2	616.2	615.0	617.5	617.5	617.0	619.4
32	0		617.0	616.1	615.1	618.6	619.2	617.4	611.0	617.0	619.0	617.4	619.3
37	0		614.2	615.9	615.0	610.0	617.0	618.0	613.5	617.5	619.0	617.1	619.0
42	0		612.3	619.0	611.6	611.0	616.8	618.0	613.0	615.0	618.0	617.2	618.7
47	0		614.0	610.1	611.7	612.8	617.0	617.5	612.0	610.0	617.9	619.3	618.9
52	0		617.1	612.1	613.9	611.0	617.0	617.3	613.0	611.5	618.0	619.7	619.2
57	0		618.2	618.0	613.1	613.5	617.2	616.1	613.0	615.0	617.5	618.2	619.3
Thermometer			37.0	38.0	38.6	38.5	38.5	38.2	38.1	38.0	38.4	39.0	38.6
			One Scale Division = 0.00033 parts of the V. F.										
			VERTICAL FORCE.										
M.	S.		211.9	213.9	212.3	210.1	209.0	208.8	210.2	209.1	208.1	207.6	207.5
3	0		211.9	213.9	212.3	210.1	209.0	208.8	210.2	209.1	208.1	207.6	207.5
8	0		211.2	211.3	212.5	210.4	209.1	208.8	210.2	209.1	208.4	207.6	207.6
13	0		211.2	213.6	212.6	210.5	209.1	208.8	210.3	209.1	208.4	207.6	208.0
18	0		213.6	213.4	212.1	210.5	209.1	208.8	210.4	208.9	208.4	207.6	208.3
23	0		213.6	212.4	210.7	210.2	208.8	208.8	210.1	208.9	208.0	206.5	208.3
28	0		213.6	212.0	211.2	210.3	208.8	209.0	210.4	208.9	208.0	207.4	208.3
33	0		213.6	212.1	210.8	210.0	208.8	209.3	210.1	208.9	208.0	207.2	208.3
38	0		213.4	212.1	210.7	210.6	208.8	209.4	209.4	209.6	208.0	209.5	208.4
43	0		213.3	212.1	210.7	210.8	208.7	209.4	209.1	209.6	207.6	209.3	208.6
48	0		213.7	211.4	210.3	210.4	208.7	210.2	209.4	209.6	207.6	209.3	208.1
53	0		211.3	211.8	210.3	210.1	208.7	210.2	209.4	208.1	207.6	209.5	208.7
58	0		213.5	211.8	210.3	210.1	208.7	210.2	209.4	208.4	207.6	209.6	207.7
Thermometer			36.8	38.1	39.2	40.0	39.9	39.9	39.7	39.4	39.6	40.0	40.0
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 32°.	Thermometers			Wind.		Weather.				
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	h.	°	°								
20	10	0	29.918	21.3	17.8	W.S.W.	Light.	Clear; cir.					
	11	0	29.922	20.0	17.1	W.S.W.	Light.	Clear; cir.					
	12	0	29.919	19.4	17.2	W.S.W.	Moderate.	Clear; halo round the moon.					
	13	0	29.917	18.9	16.7	W.S.W.	Moderate, with gusts.	Clear; halo round the moon.					
	14	0	29.905	18.1	16.1	W.S.W.	Moderate.	Clear.					
	15	0	29.905	16.9	15.6	W.S.W.	Moderate.	Clear; cir.					
	16	0	29.887	16.9	15.7	W.S.W.	Light.	Clear; scattered cir.					
	17	0	29.865	15.3	14.4	W.S.W.	Light.	Clear; cir.					
	18	0	29.849	14.4	13.3	W.S.W.	Light.	Clear.					
	19	0	29.835	13.5	12.6	W.S.W.	Light.	Clear.					
	20	0	29.850	14.5	13.3	W.S.W.	Very light (nearly calm).	Cloudy; cir					
	21	0	29.810	14.0	13.2	W. by N.	Very light (nearly calm).	Cloudy; cir.					

\* At 21° 10', Thermometer of H. F., 35° 4'; of V. F., 36° 2'.

MAGNETICAL OBSERVATIONS.

January 20th and 21st.

DECLINATION.												Angular Value of one Scale Division = 0".721.		
21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.	86. Div.
115.4	117.6	119.8	117.0	118.8	118.4	115.6	115.8	110.0	107.6	109.0	112.0	113.0	115.4	118.0
115.0	117.2	119.4	117.0	119.0	119.2	114.1	112.5	110.0	107.7	109.2	112.0	113.0	115.0	117.6
114.7	117.4	119.0	117.2	119.6	120.0	114.7	112.0	108.6	106.4	109.0	112.0	113.0	114.0	116.0
115.9	117.2	119.8	116.8	120.6	119.2	114.0	113.1	108.1	107.0	109.2	111.3	114.8	117.8	120.4
116.0	117.4	119.8	116.4	120.0	118.0	112.5	114.0	108.3	107.3	109.4	112.0	116.2	119.2	120.7
116.8	117.6	119.0	115.6	119.9	117.0	111.8	112.0	108.0	107.0	109.8	112.0	117.8	120.5	120.7
116.6	117.0	115.6	115.4	119.8	118.0	111.5	109.1	108.2	107.4	109.4	111.6	118.8	120.7	120.7
117.0	114.0	115.4	115.6	118.9	118.8	111.8	109.0	108.0	108.0	109.7	112.0	119.0	120.7	120.7
117.4	113.4	115.4	116.0	118.4	118.1	111.3	108.0	106.0	108.2	110.8	111.5	118.8	120.6	120.7
117.3	113.2	116.5	115.0	117.8	116.3	112.0	108.0	108.0	108.2	111.0	112.0	118.4	120.6	120.7
117.4	113.2	116.4	117.4	118.2	115.8	111.1	110.2	107.0	108.8	111.1	112.2	118.4	120.6	120.7
117.0	112.4	116.4	117.4	118.2	115.8	111.1	110.2	107.0	108.8	111.1	112.2	118.4	120.6	120.7
117.4	111.2	116.4	118.6	118.1	117.8	112.0	109.2	107.1	108.6	112.0	113.0	117.8	120.6	120.7

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

617.4	615.8	612.6	650.4	619.5	612.5	628.0	620.4	620.8	631.0	630.6	635.0	631.5
617.8	615.7	613.0	650.2	650.0	611.0	626.4	618.0	628.0	631.0	630.6	635.2	632.7
615.9	615.7	614.4	618.8	650.0	610.8	624.0	615.9	628.0	628.3	631.0	630.2	632.5
617.0	615.8	616.1	619.2	650.4	610.2	628.0	617.2	626.0	629.7	631.4	610.0	631.4
618.2	615.8	617.8	619.8	619.2	617.0	627.2	622.5	628.2	629.8	611.6	639.8	631.5
617.0	615.4	617.5	619.2	618.9	631.1	625.5	624.1	627.5	630.8	633.0	610.2	638.4
617.4	615.0	650.0	650.2	617.6	634.0	624.0	620.6	627.6	630.6	632.6	638.5	639.0
617.8	615.6	650.0	650.0	617.0	632.2	622.0	625.0	630.0	630.7	633.7	637.2	642.2
617.2	615.4	618.0	631.2	617.6	632.5	623.0	626.5	632.0	631.4	630.0	637.8	642.3
615.4	610.5	650.0	650.8	616.2	630.0	624.0	627.8	632.2	630.8	632.0	636.2	642.8
615.6	611.8	651.2	652.0	611.8	628.0	624.0	632.0	632.5	630.6	632.5	635.0	642.5
615.0	639.2	650.4	652.4	611.5	631.1	623.0	627.8	633.0	630.1	635.5	633.2	641.4

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

207.2	212.8	210.1	208.0	210.5	210.1	210.0	213.7	215.6	215.0	214.5	216.4	217.4
207.7	212.5	210.1	208.9	210.4	210.1	210.2	213.7	215.6	215.0	214.5	216.4	217.4
210.2	212.5	210.0	208.7	210.4	209.0	210.2	211.3	215.6	215.0	214.5	216.8	217.4
207.6	212.0	210.0	208.8	209.7	209.0	210.2	214.3	215.6	214.3	214.5	216.8	217.6
206.5	212.3	210.0	208.9	210.3	209.0	211.5	215.0	215.6	214.3	214.7	216.8	217.7
207.4	212.1	209.8	209.2	209.5	209.7	211.7	215.0	215.6	214.7	214.7	216.8	217.7
207.2	212.2	209.6	209.6	209.5	206.2	211.7	215.1	215.0	214.7	214.6	216.8	218.1
209.5	212.4	209.6	209.8	209.5	206.8	212.1	215.2	215.0	214.3	215.6	216.8	219.2
209.3	212.3	209.1	210.0	209.8	207.9	212.5	215.2	215.0	214.7	215.9	216.8	219.2
209.3	212.4	209.1	210.3	209.7	208.4	214.3	215.2	215.0	214.7	216.6	216.8	219.2
209.5	212.7	209.1	210.5	210.4	208.8	213.3	215.6	215.0	214.7	216.4	216.8	219.3
209.6	209.9	208.9	210.5	210.1	209.5	213.3	215.6	215.0	214.5	216.4	216.9	219.3

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.	°	°			
20 22 0	29.820	14.4	13.0	W. by N.	Very light (nearly calm).	Clear; cir.
23 0	29.822	14.2	13.2	W. by N.	Very light (nearly calm).	Clear; cir.
21 0 0	29.824	14.0	12.8	W. by N.	Very light (nearly calm).	Cloudy; cir.-cum. and cir.-strat.
1 0	29.822	13.5	12.4	W. by N.	Light.	Cloudy; cir.-cum. and cir.-strat.
2 0	29.836	12.9	11.3	W. by N.	Moderate.	Cloudy; cir.-cum. and cir.-strat. and haze.
3 0	29.840	13.3	11.6	W. by N.	Fresh.	Cloudy; cir.-cum. and cir.-strat.
4 0	29.820	13.8	11.6	W. by N.	Fresh.	Cloudy; cir.-cum. and cir.-strat. and haze.
5 0	29.816	13.3	10.9	N.W.	Brisk, with gusts.	Cloudy; cir.-cum. and cir.-strat.
6 0	29.818	9.8	8.9	N.W. by N.	Moderate, with gusts.	Cloudy; cir.-cum. and cir.-strat.
7 0	29.816	9.8	8.9	N.N.E.	Moderate.	Cloudy; cir.-cum. and cir.-strat. and haze.
8 0	29.828	8.7	7.8	E.	Moderate, with gusts.	Cloudy; cir.-cum. and cir.-strat.
9 0	29.854	6.5	5.6	E.	Moderate.	Cloudy; cir.-cum. and cir.-strat.

February 26th and 27th.			MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.			Angular Value of one Scale Division = 0° 721.								DECLINATION.				
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.		
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		110°0	116°0	117°0	110°8	112°2	113°5	114°0	110°2	110°2	109°8	107°0		
5	0		110°9	117°0	116°0	110°8	112°0	112°2	114°0	109°8	110°2	110°2	107°9		
10	0		110°8	116°0	114°2	111°2	112°5	112°2	114°2	110°4	111°0	110°8	108°5		
15	0		111°0	118°0	112°9	111°8	116°7	113°0	114°8	110°8	111°4	110°8	109°2		
20	0		111°0	119°2	112°0	112°7	118°8	113°5	114°2	110°8	111°0	110°0	110°0		
25	0		110°9	118°0	111°5	113°0	118°2	112°7	114°5	111°0	110°8	109°2	110°8		
30	0		110°4	118°8	111°4	113°8	115°5	111°9	114°8	111°6	110°4	109°0	110°4		
35	0		110°5	119°0	111°6	113°7	116°0	112°8	114°4	111°5	110°2	108°6	110°6		
40	0		110°2	121°0	111°7	113°0	119°2	113°0	113°5	111°8	110°0	109°0	111°0		
45	0		111°0	119°2	111°4	112°2	121°0	113°0	114°0	110°7	109°6	108°4	112°4		
50	0		112°0	118°2	111°5	112°2	121°2	113°8	113°5	110°8	110°0	107°2	112°3		
55	0		111°2	117°2	111°4	112°5	117°5	113°7	112°0	111°0	110°6	107°4	112°0		
			One Scale Division = '000087 parts of the H. F.								HORIZONTAL FORCE.				
M.	S.		639°0	621°5	630°0	626°4	627°0	616°6	632°8	634°8	634°5	631°2	632°4		
2	0		638°0	619°5	629°0	626°7	626°4	615°0	632°2	634°0	634°0	633°8	632°9		
12	0		610°0	617°5	630°0	624°8	625°2	613°8	632°8	635°0	634°2	634°2	633°0		
17	0		641°0	618°0	630°5	623°7	627°8	639°0	632°0	634°8	634°8	634°0	633°9		
22	0		641°0	620°0	629°0	624°3	634°0	638°4	633°5	635°0	634°8	633°5	633°8		
27	0		641°0	616°5	628°0	622°2	634°4	635°2	633°5	634°8	636°8	633°2	634°4		
32	0		648°0	614°5	627°5	622°6	642°2	633°0	633°9	634°0	637°0	634°0	633°2		
37	0		637°5	617°5	626°0	622°7	632°2	631°2	634°8	633°8	636°4	633°8	633°0		
42	0		635°0	620°5	625°5	623°0	635°0	631°2	635°0	634°2	635°8	633°8	633°0		
47	0		633°0	626°5	624°0	624°7	635°2	631°3	635°0	634°4	634°2	633°9	633°4		
52	0		631°0	628°0	625°0	625°2	645°4	633°0	635°5	635°2	634°4	633°0	632°9		
57	0		626°0	631°0	626°2	625°2	646°7	633°2	635°0	635°0	635°8	632°6	631°4		
Thermometer			43°9	43°4	43°5	43°9	43°6	43°4	43°3	43°5	43°5	43°4	43°6		
			One Scale Division = '000063 parts of the V. F.								VERTICAL FORCE.				
M.	S.		204°5	207°9	205°9	202°3	202°4	198°7	198°2	199°9	200°3	201°6	201°0		
3	0		205°5	208°1	205°9	201°6	202°2	197°9	198°2	199°9	201°3	201°6	201°4		
13	0		205°5	208°1	205°2	201°4	202°2	197°9	198°8	199°9	200°3	201°5	201°0		
18	0		207°4	208°0	205°2	200°6	201°8	197°2	198°8	199°9	200°8	201°5	200°6		
23	0		206°9	208°0	205°2	200°5	201°8	196°6	198°8	199°9	201°1	201°5	201°2		
28	0		206°9	208°0	204°0	200°2	201°3	196°4	199°2	200°4	201°1	201°4	200°9		
33	0		206°9	208°0	204°0	200°9	200°9	196°4	199°7	200°4	201°1	201°4	200°9		
38	0		206°9	207°2	203°2	200°9	200°9	197°4	199°7	200°4	201°1	201°4	200°3		
43	0		206°9	207°2	203°2	201°4	200°4	197°4	199°9	200°4	201°3	201°4	200°3		
48	0		206°9	208°4	202°9	201°4	200°3	198°0	199°9	200°2	201°6	202°2	201°0		
53	0		206°9	208°4	202°9	201°6	201°4	198°2	199°9	200°2	201°6	202°2	201°4		
58	0		206°9	207°3	202°8	201°4	200°6	198°0	199°7	200°3	201°6	200°9	200°9		
Thermometer			42°9	42°7	43°4	43°0	41°9	41°6	41°6	43°0	41°8	41°0	41°4		

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.								
26	10	0	29°837	25°3	23°3	E. by N.	Moderate, with gusts.	Cloudy; cir.-cum. and haze.			
	11	0	29°843	25°4	22°5	E. by N.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.			
	12	0	29°774	25°5	23°7	E. by N.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.			
	13	0	29°742	25°9	23°5	E.	Brisk, with gusts.	Cloudy; cir.-cum. and haze.			
	14	0	29°741	26°3	24°2	E.	Fresh.	Cloudy; cir.-cum. and haze.			
	15	0	29°700	27°6	25°7	E.	Fresh.	Cloudy; cir.-cum. and haze.			
	16	0	29°676	27°9	26°2	E.	Fresh.	Cloudy; cir.-cum. and haze.			
	17	0	29°600	27°7	26°7	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.			
	18	0	29°584	28°0	27°4	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.			
	19	0	29°558	27°9	27°3	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.			
	20	0	29°494	27°6	27°4	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.			
	21	0	29°466	27°5	27°2	E.	Fresh.	Cloudy; cir.-cum., haze, and snow.			

\* At 27<sup>th</sup> 10<sup>th</sup>, Thermometer of H.F., 45° 4'; of V.F., 44° 6'.

MAGNETICAL OBSERVATIONS.

February 26th and 27th.

DECLINATION.

Angular Value of one Scale-Division = 0' 721.

19th.		20th.		21st.		22nd.		23rd.		24th.		25th.		26th.		27th.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
109'8	107'0	112'4	113'0	112'9	113'1	116'0	116'0	115'4	108'4	102'8	102'5	104'1	106'7				
110'2	107'9	113'0	112'2	112'5	113'1	116'0	115'7	113'0	107'8	102'2	101'4	101'1	107'0				
110'8	108'5	113'2	112'5	112'4	113'8	115'9	116'2	112'2	107'0	103'0	101'2	101'2	107'7				
110'8	109'2	113'4	112'5	113'0	113'1	115'2	114'6	111'2	107'0	103'2	101'2	105'1	107'6				
110'0	110'0	113'6	113'0	113'0	114'0	116'2	114'2	111'0	106'2	102'6	101'8	105'6	108'0				
109'2	110'8	113'6	113'0	113'0	115'0	117'0	114'7	110'8	105'1	103'0	102'1	105'7	108'1				
109'0	110'4	113'1	112'9	113'0	115'2	117'3	115'0	111'2	104'8	103'2	102'9	105'5	108'2				
108'6	110'6	113'0	113'0	112'8	116'0	117'0	115'0	110'2	104'2	102'4	102'5	105'7	108'8				
109'0	111'0	113'2	113'0	112'7	115'3	116'8	114'5	110'2	104'0	102'2	102'6	106'0	110'0				
108'4	112'1	113'2	113'0	112'9	115'3	116'2	114'2	110'3	103'4	101'8	105'2	106'1	109'4				
107'2	112'3	113'3	113'2	113'1	116'0	116'0	113'4	110'8	103'4	102'0	103'3	106'8	110'0				
107'1	112'0	113'2	113'2	113'8	115'6	116'0	114'2	109'2	103'4	101'8	103'8	106'2	110'5				

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.

631'4	633'8	634'6	628'0	626'2	626'0	620'2	612'0	616'5	613'8	622'5	623'1	629'9
632'8	631'0	631'7	628'1	626'2	626'0	620'3	610'2	616'2	612'2	621'8	621'0	630'0
633'1	633'2	633'0	627'8	627'5	625'0	620'2	610'0	616'8	613'5	621'2	625'8	628'8
633'8	633'5	632'6	628'0	626'5	625'0	620'2	610'2	617'0	614'2	621'9	626'2	629'0
633'0	633'7	633'0	628'0	625'0	621'0	620'0	609'2	617'8	616'0	621'8	625'1	628'1
633'9	633'8	631'2	627'0	625'0	623'0	621'2	611'0	617'8	616'5	621'6	626'9	631'5
634'0	633'9	631'0	627'0	626'5	624'0	620'2	610'1	616'5	618'8	621'4	629'0	630'9
633'2	631'0	630'0	624'0	627'5	623'0	620'0	610'0	615'8	618'2	623'0	629'0	631'5
633'8	634'0	629'5	622'8	626'0	622'2	618'2	610'0	616'0	618'7	623'0	630'0	632'0
633'9	633'9	629'4	621'1	626'0	621'4	617'4	610'1	613'2	618'8	621'0	630'6	632'0
633'0	634'6	629'7	621'8	626'5	621'0	615'2	611'5	611'2	621'2	623'0	629'0	631'0
632'6	631'1	635'0	625'8	626'0	620'3	613'6	613'1	615'1	621'0	623'1	629'0	631'5

43'4	43'6	43'3	42'8	41'6	42'0	42'0	42'2	42'9	41'1	41'4	41'8	45'4	45'2'4
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

201'3	202'1	200'6	201'1	203'6	201'7	201'2	203'4	201'5	203'3	201'9	200'8	201'0
201'9	201'7	200'6	201'1	203'8	201'7	203'8	203'8	201'5	202'5	201'9	200'8	201'0
201'6	201'7	200'5	201'0	203'8	201'7	203'8	203'3	201'8	202'3	201'6	200'7	201'0
201'5	201'9	200'6	201'0	204'7	201'7	203'8	201'1	201'8	202'3	201'6	200'7	201'1
201'5	201'9	200'6	201'0	204'7	201'2	203'8	201'1	201'6	202'3	201'4	200'9	201'1
201'1	200'9	200'5	201'5	201'7	201'2	203'8	201'2	201'6	202'2	201'1	200'9	201'7
203'0	202'0	200'5	201'5	204'7	201'2	201'3	203'7	201'6	202'2	201'1	200'9	201'0
202'8	202'0	201'0	203'1	204'7	201'2	203'5	203'9	203'1	202'2	201'1	200'9	201'3
203'1	202'0	201'0	203'3	204'7	201'1	203'3	203'9	203'6	201'8	201'1	200'9	201'3
202'1	202'0	201'0	203'1	204'7	201'2	203'3	203'9	203'6	201'9	201'1	200'9	201'5
202'2	201'0	201'0	203'1	204'7	201'2	203'5	203'8	203'3	202'2	200'9	200'9	201'5
202'2	201'1	201'0	203'1	204'7	201'0	203'5	204'5	203'3	202'1	200'9	201'0	201'4

41'2	43'9	43'8	42'7	42'2	42'0	42'1	42'6	43'7	41'2	41'4	41'8	44'4
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Weather.	Mean G-stingsen Therm.			Barometer at 32°.		Thermometers.		Wind.		Weather.
	D.	H.	M.	F.	°	Dry.	Wet.	Direction.	Force.	
	26	22	0	29'448	°	27'5	27'2	E.	Fresh.	Cloudy; cir-cum., haze, and snow.
and haze.	27	23	0	29'392	27'5	27'2	27'2	E.	Fresh.	Cloudy; cir-cum., haze, and snow.
and haze.	27	0	0	29'355	26'3	26'0	26'0	E.	Fresh.	Cloudy; cir-cum., haze, and snow.
and haze.		1	0	29'301	26'5	26'2	26'2	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
and haze.		2	0	29'229	27'9	27'6	27'6	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
and haze.		3	0	29'217	27'0	26'9	26'9	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
and haze.		4	0	29'167	27'7	27'7	27'7	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
and haze.		5	0	29'073	28'9	28'7	28'7	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
haze, and snow.		6	0	28'954	29'3	29'2	29'2	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
haze, and snow.		7	0	28'925	29'9	29'3	29'3	E.	Fresh, with squalls.	Cloudy; cir-cum., haze, and snow.
haze, and snow.		8	0	28'866	30'7	30'4	30'4	E.	Fresh.	Cloudy; cir-cum., haze, and snow.
haze, and snow.		9	0	28'838	30'8	30'4	30'4	E.	Fresh.	Cloudy; cir-cum., haze, and snow.

March 24th and 25th.			MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.			Angular Value of one Scale Division = 0° 721.								DECLINATION.			
			10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		101° 2	103° 0	117° 0	108° 0	109° 3	107° 0	109° 2	107° 5	94° 4	101° 2	113° 8	
5	0		103° 8	102° 8	112° 2	107° 1	110° 0	109° 0	109° 4	108° 0	93° 8	107° 8	113° 8	
10	0		102° 7	103° 6	109° 2	103° 3	110° 6	109° 2	110° 0	107° 5	95° 3	112° 0	114° 9	
15	0		102° 0	106° 2	107° 8	103° 5	111° 0	108° 2	111° 0	105° 0	99° 0	111° 8	113° 5	
20	0		102° 0	111° 2	108° 8	103° 2	110° 9	108° 1	111° 1	101° 8	101° 2	117° 3	112° 2	
25	0		102° 0	120° 7	108° 4	106° 2	112° 1	110° 9	110° 6	106° 8	101° 0	119° 1	112° 0	
30	0		102° 2	125° 1	109° 2	107° 0	112° 3	111° 4	110° 2	107° 0	101° 2	120° 0	113° 0	
35	0		102° 2	121° 8	109° 2	107° 1	110° 9	111° 8	108° 9	105° 0	99° 1	118° 7	113° 2	
40	0		102° 8	123° 6	109° 0	107° 0	107° 9	110° 1	108° 3	102° 5	96° 5	116° 2	113° 8	
45	0		102° 6	122° 5	109° 0	107° 2	106° 9	109° 9	108° 3	101° 0	91° 5	114° 1	114° 1	
50	0		103° 1	120° 5	108° 8	107° 3	107° 9	109° 1	108° 0	100° 0	95° 8	115° 0	111° 9	
55	0		103° 1	119° 5	107° 5	107° 8	108° 9	109° 2	106° 7	97° 8	99° 2	113° 8	113° 6	
			One Scale Division = '000087 parts of the H. F.								HORIZONTAL FORCE.			
M.	S.													
2	0		628° 7	630° 2	617° 5	622° 8	615° 8	617° 8	619° 1	621° 9	607° 0	607° 5	619° 0	
7	0		626° 0	622° 8	619° 6	622° 5	616° 0	618° 0	617° 8	622° 0	604° 0	605° 0	620° 0	
12	0		626° 0	612° 7	617° 5	620° 5	616° 3	618° 3	618° 2	622° 0	606° 0	608° 0	620° 0	
17	0		626° 5	601° 2	614° 2	617° 8	617° 3	618° 0	617° 0	622° 0	607° 2	610° 2	621° 2	
22	0		626° 2	601° 8	613° 0	617° 1	617° 0	617° 0	618° 0	622° 0	607° 7	616° 0	622° 0	
27	0		628° 5	6° 39° 3	612° 5	618° 6	615° 6	619° 1	618° 0	618° 6	607° 9	617° 5	621° 9	
32	0		628° 8	612° 2	611° 5	620° 0	618° 0	619° 0	622° 0	625° 2	615° 0	621° 5	622° 0	
37	0		629° 0	615° 8	617° 4	619° 1	621° 0	620° 8	621° 0	622° 5	614° 0	622° 0	622° 0	
42	0		631° 2	619° 0	621° 8	617° 6	619° 0	623° 0	621° 0	619° 0	610° 0	623° 0	620° 5	
47	0		630° 6	618° 5	619° 8	616° 0	618° 0	620° 5	620° 9	616° 0	605° 0	622° 0	620° 5	
52	0		631° 2	618° 0	621° 2	614° 7	616° 9	619° 0	620° 9	613° 2	603° 9	620° 0	621° 5	
57	0		631° 4	620° 0	622° 8	615° 6	618° 0	619° 8	620° 1	612° 0	604° 3	620° 0	623° 0	
Thermometer			51° 8	52° 6	52° 8	52° 2	51° 5	51° 0	50° 1	50° 1	50° 0	49° 8	49° 6	
			One Scale Division = '000063 parts of the V. F.								VERTICAL FORCE.			
M.	S.													
3	0		195° 8	195° 7	191° 7	191° 1	191° 2	192° 0	191° 1	190° 1	175° 3	171° 0	187° 2	
8	0		195° 2	195° 7	194° 1	191° 1	191° 2	192° 0	191° 1	190° 7	175° 7	171° 0	187° 8	
13	0		195° 2	195° 5	1° 34° 4	190° 9	191° 2	192° 0	191° 1	190° 7	172° 0	174° 2	188° 7	
18	0		195° 0	195° 5	9	190° 1	190° 9	192° 0	191° 2	190° 7	172° 0	175° 6	188° 7	
23	0		195° 0	196° 4	32° 9	190° 1	190° 5	192° 0	191° 2	187° 0	167° 8	178° 2	189° 7	
28	0		191° 9	196° 7	192° 8	190° 3	190° 5	192° 0	191° 1	186° 0	167° 5	178° 5	189° 7	
33	0		191° 8	196° 7	192° 8	190° 4	190° 5	192° 0	191° 2	184° 3	167° 8	180° 1	189° 7	
38	0		191° 8	196° 2	192° 9	190° 5	191° 6	192° 0	190° 8	184° 0	167° 8	182° 0	189° 7	
43	0		195° 2	196° 2	191° 9	190° 5	191° 6	192° 0	191° 1	183° 2	167° 8	183° 6	190° 1	
48	0		195° 2	195° 5	191° 9	190° 5	191° 6	190° 7	191° 1	179° 7	170° 5	181° 9	190° 6	
53	0		195° 6	195° 2	191° 9	190° 5	191° 6	191° 5	191° 1	179° 6	170° 5	185° 1	190° 6	
58	0		195° 7	194° 7	191° 7	190° 5	191° 8	191° 5	190° 9	177° 1	172° 5	186° 3	190° 6	
Thermometer			51° 2	51° 8	51° 8	52° 1	52° 9	52° 0	51° 3	51° 2	51° 2	51° 4	50° 8	
Increasing Numbers denote decreasing Westerly Declination.														
METEOROLOGICAL OBSERVATIONS.														
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.						
				Dry.	Wet.	Direction.	Force.							
D.	H.	M.	In.	°	°									
24	10	0	29° 583	37° 9	32° 9	W.S.W.	Light.	Cloudy; cir-cum, cir-strat, and haze.						
	11	0	29° 576	36° 7	31° 4	S.W. by S.	Light.	Cloudy; cir-cum, cir-strat, and haze.						
	12	0	29° 561	35° 0	30° 3	S. by W.	Light.	Cloudy; cir-cum, cir-strat, and haze.						
	13	0	29° 561	33° 1	29° 5	S.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						
	14	0	29° 565	32° 8	29° 2	S.S.W.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						
	15	0	29° 551	32° 2	28° 8	S.S.W.	Very light.	Cloudy; cir-cum, cir-strat, and haze. Halo round the moon, diameter about 40.						
	16	0	29° 520	32° 6	29° 3	S.S.W.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						
	17	0	29° 500	30° 7	27° 8	S.E. by S.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						
	18	0	29° 451	30° 7	27° 8	S.E.	Light.	Cloudy; cir-cum, cir-strat, and haze.						
	19	0	29° 412	31° 2	28° 4	E. by S.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						
	20	0	29° 357	32° 9	29° 7	E.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						
	21	0	29° 284	31° 1	30° 7	E.	Very light.	Cloudy; cir-cum, cir-strat, and haze.						

\* At 25° 10h, Thermometer of H. F., 52° 6; of V. F., 52° 5.



April 21st and 22nd.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0".721.										DECLINATION.	
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	101.6	128.4	126.4	107.4	113.4	111.3	109.6	107.0	106.9	108.4	109.8	109.8
5	0	102.2	119.6	121.6	107.5	113.8	111.5	108.2	109.3	106.5	109.2	109.9	109.9
10	0	102.4	114.5	115.4	108.4	111.6	113.3	106.1	109.7	106.7	109.4	109.8	109.8
15	0	102.4	112.6	112.4	111.4	112.4	112.3	104.5	107.9	107.5	109.3	109.8	109.8
20	0	102.4	125.4	110.8	113.3	113.9	110.3	102.6	109.5	108.4	110.0	109.6	109.6
25	0	103.0	125.2	110.2	116.6	112.9	107.1	100.8	106.4	108.4	110.0	109.8	109.8
30	0	104.4	122.2	109.2	128.8	112.3	106.0	101.6	107.4	108.6	110.0	110.0	110.0
35	0	104.2	123.0	108.2	127.8	111.6	106.6	103.6	109.4	108.0	110.2	109.2	109.2
40	0	103.6	134.8	108.4	121.2	113.5	107.3	107.7	108.9	108.4	110.2	109.1	109.1
15	0	108.4	136.8	108.6	120.8	113.4	107.4	107.0	107.6	109.2	110.2	109.6	109.6
50	0	116.0	131.6	108.4	117.4	110.8	105.3	105.9	107.1	109.0	110.0	110.2	110.2
55	0	124.2	132.6	109.9	114.5	111.1	107.0	106.0	107.8	109.0	110.0	110.4	110.4
		One Scale Division = 1/1000087 parts of the H. F.										HORIZONTAL FORCE.	
M.	S.	607.4	610.5	619.5	596.8	599.0	590.9	601.4	601.2	598.0	600.5	597.1	597.1
7	0	619.5	615.4	611.0	595.3	601.6	592.2	600.0	606.1	598.2	600.6	597.9	599.9
12	0	613.5	631.5	611.0	591.8	600.2	591.1	598.8	605.2	598.9	600.0	598.1	599.9
17	0	618.6	631.5	607.0	595.0	600.4	595.0	598.0	602.7	599.0	600.0	598.5	600.0
22	0	621.7	626.8	606.5	593.7	599.1	596.2	598.5	598.4	599.0	600.0	597.0	600.0
27	0	620.0	631.0	606.2	581.8	598.1	596.8	597.0	596.9	599.0	599.5	598.0	600.0
32	0	615.8	623.5	603.5	598.2	596.5	597.6	597.9	597.2	599.2	599.0	598.9	600.0
37	0	619.7	607.5	600.3	605.1	593.0	595.2	594.5	598.0	599.0	598.8	598.2	600.0
42	0	618.2	613.0	598.1	603.0	591.0	597.8	600.0	598.9	598.9	598.5	598.0	600.0
47	0	607.5	621.7	597.1	607.1	591.0	599.0	603.0	599.0	598.9	599.0	597.8	600.0
52	0	607.5	617.8	597.5	610.5	591.3	596.2	607.0	597.5	598.5	597.5	599.0	600.0
57	0	617.6	617.1	596.2	601.3	590.3	596.8	606.2	597.0	598.4	599.2	600.0	601.0
Thermometer		59.1	59.9	60.6	61.4	62.1	62.5	62.5	62.0	62.0	61.9	61.5	61.5
		One Scale Division = 1/1000083 parts of the V. F.										VERTICAL FORCE.	
M.	S.	184.7	185.7	181.2	178.9	166.1	167.5	164.6	159.3	161.7	167.0	171.0	170.0
8	0	186.0	191.6	183.6	177.4	166.4	166.4	164.6	159.8	161.7	167.0	171.2	170.0
13	0	187.5	186.5	182.8	176.7	166.4	165.0	164.6	159.8	161.7	167.0	171.2	170.0
18	0	188.2	189.1	184.7	175.4	166.1	163.8	164.6	159.8	164.8	168.7	170.8	170.0
23	0	189.5	189.1	181.7	175.0	166.1	161.6	164.6	160.6	164.8	168.7	170.8	170.0
28	0	189.5	187.2	184.7	173.2	166.7	165.4	162.5	160.6	164.8	168.7	170.8	170.0
33	0	188.9	184.1	182.1	172.7	166.7	165.1	161.3	160.8	164.8	169.5	170.8	170.0
38	0	191.7	181.1	182.2	171.3	167.2	164.1	161.3	160.8	165.0	169.8	170.8	170.0
43	0	191.8	185.7	181.2	169.6	167.0	161.1	161.3	160.8	165.0	169.8	170.8	170.0
48	0	192.0	186.4	181.2	168.7	167.0	163.7	161.3	160.8	165.0	170.5	170.8	170.0
53	0	192.8	185.2	181.2	168.5	167.0	163.9	161.3	161.9	165.3	170.5	170.8	170.0
58	0	197.8	185.2	179.8	166.5	167.0	164.6	161.3	161.9	165.6	170.5	170.8	171.0
Thermometer		58.2	58.8	59.3	60.0	62.5	63.6	63.7	62.7	62.7	62.6	61.7	61.7
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Baromet. at 32°.	Thermometers.		Wind.		Weather.					
D.	H.	M.	In.	Dry.	Wet.	Direction.	Force.						
21	10	0	29.178	65.0	—	W.S.W.	Light.	Cloudy; cir.-cum., cir.-strat., and haze.					
	11	0	29.181	62.7	—	W.S.W.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.					
	12	0	29.192	59.8	—	W.S.W.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.					
	13	0	29.209	58.5	—	W.S.W.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.					
	14	0	29.210	60.5	—	W. by S.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.					
	15	0	29.222	59.7	—	N.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze.					
	16	0	29.222	59.5	—	N.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze; light thunder and rain.					
	17	0	29.221	58.1	—	S.S.E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze; light thunder and rain.					
	18	0	29.214	55.6	—	E.N.E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze; light thunder and rain.					
	19	0	29.242	52.0	—	E.N.E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze; light thunder and rain.					
	20	0	29.240	53.8	—	N. by E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze; light thunder and rain.					
	21	0	29.218	55.6	—	E.S.E.	Very light.	Cloudy; cir.-cum., cir.-strat., and haze; light thunder and rain.					

\* At 22° 10', Thermometer of H. F., 59° 5'; of V. F., 59° 6'.



ON.	
19°.	20°.
Sc. Div.	Sc. Div.
108°4	109°8
109°2	109°9
109°4	109°8
109°3	109°8
110°0	109°6
110°0	109°8
110°0	110°0
110°2	109°1
110°2	109°6
110°0	110°1
110°0	110°4
AL. FORCE.	
600°5	597°1
600°6	597°9
600°0	598°1
600°0	598°5
600°0	597°0
599°5	598°0
599°0	598°9
598°8	598°2
598°5	598°0
599°0	597°8
597°5	599°0
599°2	600°0
61°9	61°5
FORCE.	
167°0	171°0
167°0	171°2
167°0	171°2
168°7	170°8
168°7	170°8
169°5	170°8
169°8	170°8
169°8	170°8
170°5	170°8
170°5	170°8
170°5	170°8
62°6	61°7
g Westerly Declination.	
light thunder and rain.	
light thunder and rain.	
light thunder and rain.	
light thunder and rain.	
light thunder and rain.	
light thunder and rain.	

MAGNETICAL OBSERVATIONS.												April 21st and 22nd.		
DECLINATION.						Angular Value of one Scale Division = 0° 721.								
21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
108°3	109°6	110°0	112°7	113°2	113°9	110°5	110°2	107°0	103°7	100°6	106°5	102°4	109°5	105°4
109°5	110°3	111°2	113°2	113°2	113°6	109°6	109°5	107°4	103°9	100°0	107°4	102°0	109°4	105°3
110°2	109°6	112°5	113°4	111°0	112°5	110°4	109°4	107°0	103°0	100°4	106°4	102°0	109°3	105°4
109°6	108°7	112°6	113°6	111°4	109°8	110°4	109°0	108°2	103°4	100°5	105°4	102°0	109°5	105°4
109°2	109°2	112°6	113°8	111°8	109°7	110°7	110°3	108°8	103°3	100°6	105°3	102°3	109°6	105°3
109°6	108°8	112°6	113°7	111°2	110°4	111°0	108°6	108°0	102°6	100°6	101°0	102°5	109°6	105°3
108°6	109°2	112°2	113°7	111°4	110°4	114°2	108°3	107°0	102°1	100°5	104°0	102°2	109°6	105°3
108°6	109°2	112°0	113°0	111°6	110°6	113°4	108°4	106°6	102°4	100°4	103°8	102°2	109°6	105°3
108°1	110°0	112°2	113°6	111°4	110°4	112°5	107°3	105°0	102°0	100°4	103°2	102°8	109°6	105°3
109°5	110°4	112°7	113°9	111°0	110°0	111°0	106°8	105°6	101°0	98°8	103°2	102°2	109°6	105°3
109°3	110°3	112°6	111°4	111°4	110°8	110°8	105°8	105°4	100°4	97°4	102°6	103°2	109°6	105°3
109°7	110°4	113°1	111°6	111°8	110°5	110°6	105°9	104°7	101°4	101°4	102°4	103°0	109°6	105°3
HORIZONTAL FORCE.												Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° G.		
599°0	599°0	601°2	600°7	598°0	581°0	585°6	582°8	575°5	586°2	587°0	602°0	601°0	603°8	610°0
599°5	600°5	601°8	600°0	598°4	583°8	581°6	579°0	575°2	586°9	588°5	610°0	603°8	610°0	603°8
600°0	599°0	602°2	599°3	597°8	584°2	585°0	581°2	576°0	586°0	589°0	604°0	603°0	603°0	603°0
600°0	597°2	602°0	598°0	596°0	585°0	586°1	578°0	574°6	588°0	590°0	601°5	603°4	603°4	603°4
600°0	598°0	602°2	598°0	596°0	585°3	585°9	576°2	571°0	585°0	592°2	601°0	602°0	602°0	602°0
600°9	598°2	602°3	598°6	591°7	585°4	585°1	579°0	577°0	586°5	593°5	600°0	601°6	601°6	601°6
600°0	598°2	601°8	600°0	591°0	585°0	581°7	576°1	576°0	586°8	590°3	606°0	601°6	601°6	601°6
600°0	598°3	601°6	599°2	593°2	583°2	585°4	580°0	575°4	586°5	590°2	601°7	601°0	601°0	601°0
600°5	598°4	601°4	598°2	592°3	583°2	581°0	578°5	576°0	587°0	581°0	603°0	602°0	602°0	602°0
601°0	598°6	602°8	598°4	590°1	583°2	581°8	577°0	577°7	588°0	581°4	603°0	600°7	600°7	600°7
600°2	601°4	602°6	598°0	588°2	581°8	581°8	576°0	581°5	591°0	581°6	604°2	598°0	598°0	598°0
601°5	601°3	602°0	598°2	587°8	581°7	579°0	578°0	582°2	591°0	590°2	603°0	598°3	598°3	598°3
61°5	61°5	61°6	61°5	61°5	61°0	60°8	60°5	60°4	60°2	60°0	59°5	59°5	59°5	59°5
VERTICAL FORCE.												Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° G.		
170°0	170°4	170°3	170°6	170°6	171°0	172°8	173°3	173°3	179°2	178°6	186°9	179°6	179°6	179°6
170°0	170°1	170°7	170°6	170°5	171°0	172°8	173°3	173°2	179°2	179°1	186°0	179°6	179°6	179°6
170°3	170°4	171°2	170°2	169°8	171°2	172°8	173°5	173°2	179°0	179°1	184°2	179°6	179°6	179°6
170°6	170°4	171°3	169°7	170°3	171°8	172°6	173°5	173°2	178°6	179°1	183°3	179°7	179°7	179°7
170°6	170°6	171°3	169°8	170°3	171°8	172°9	173°5	173°2	179°2	180°0	183°3	179°5	179°5	179°5
170°6	171°0	171°5	169°7	170°8	171°8	172°9	173°9	173°2	179°2	180°0	182°5	179°5	179°5	179°5
170°6	171°0	171°1	170°4	171°1	171°8	172°6	173°9	173°2	179°2	180°0	182°1	179°5	179°5	179°5
170°6	170°4	171°2	170°3	171°1	171°8	172°6	171°6	173°2	179°2	180°0	181°5	179°5	179°5	179°5
170°4	169°9	171°3	169°8	171°8	171°9	173°4	173°3	178°1	179°2	179°7	180°9	179°4	179°4	179°4
170°4	170°4	171°1	169°8	172°0	172°9	173°2	173°5	178°1	179°2	179°8	180°6	178°7	178°7	178°7
170°5	170°4	171°1	169°8	171°6	173°0	173°0	173°5	178°6	179°5	181°6	180°5	178°5	178°5	178°5
171°2	170°1	170°6	169°8	171°9	172°8	172°6	173°5	178°6	179°5	181°5	179°6	178°5	178°5	178°5
61°7	61°7	61°8	61°7	61°7	61°0	60°6	60°4	60°3	60°0	60°0	60°0	59°6	59°6	59°6
and increase in Horizontal and Vertical Force.														
METEOROLOGICAL OBSERVATIONS														
Mean Chronogen Time			Barometer at 32.	Thermometers.		Wind.		Weather.						
D.	H.	M.		Dry.	Wet.	Direction.	Force.							
21	22	0	29°534	51°4	—	E.S.E.	Very light.	Cloudy; cir.-cum., cir.-strat. and haze.						
	23	0	29°542	52°2	—	S.E.	Very light.	Cloudy; cir.-cum., cir.-strat. and haze.						
22	0	0	29°571	49°3	—	S.E.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	1	0	29°592	49°9	—	S.E.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	2	0	29°603	52°4	—	N.E. by N.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	3	0	29°632	51°2	—	N.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	4	0	29°611	51°0	—	N. by E.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	5	0	29°653	49°3	—	N.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	6	0	29°667	47°9	—	N.N.E.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	7	0	29°684	46°9	—	N.N.E.	Very light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	8	0	29°684	45°9	—	N.N.E.	Light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						
	9	0	29°682	45°5	—	N.E.	Light.	Cloudy; cir.-strat., cir. and cir.-cum.; rain.						

light thunder and rain.  
light thunder and rain.  
light thunder and rain.  
light thunder and rain.  
light thunder and rain.  
light thunder and rain.

May 28th and 29th.		MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.		
		10%.	11%.	12%.	13%.	14%.	15%.	16%.	17%.	18%.	19%.	20%.		
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	106° 9'	108° 0'	111° 9'	112° 2'	113° 4'	115° 4'	111° 2'	111° 4'	111° 4'	121° 0'	81° 8'		
5	0	106° 1'	108° 1'	112° 7'	112° 9'	114° 4'	119° 9'	108° 6'	111° 2'	111° 0'	123° 6'	80° 2'		
10	0	106° 1'	108° 6'	114° 6'	113° 1'	115° 2'	122° 6'	109° 8'	110° 8'	111° 7'	122° 2'	81° 2'		
15	0	105° 5'	108° 4'	113° 4'	116° 9'	115° 0'	127° 2'	112° 2'	110° 6'	112° 2'	123° 2'	88° 4'		
20	0	105° 9'	108° 4'	112° 9'	117° 8'	115° 6'	126° 9'	115° 2'	111° 4'	112° 1'	126° 2'	100° 0'		
25	0	105° 9'	108° 4'	112° 7'	115° 8'	114° 9'	126° 4'	115° 7'	112° 0'	114° 2'	129° 8'	101° 4'		
30	0	105° 6'	108° 4'	110° 4'	115° 6'	114° 4'	125° 0'	115° 5'	111° 2'	114° 2'	132° 4'	108° 5'		
35	0	106° 1'	108° 9'	112° 1'	115° 4'	113° 5'	114° 6'	111° 2'	111° 0'	113° 0'	131° 8'	108° 8'		
40	0	106° 3'	108° 4'	114° 0'	114° 5'	113° 4'	112° 3'	113° 8'	112° 3'	115° 0'	129° 9'	114° 1'		
45	0	106° 9'	109° 4'	113° 0'	113° 4'	112° 0'	112° 9'	113° 4'	112° 8'	115° 0'	109° 6'	112° 2'		
50	0	107° 1'	110° 2'	110° 0'	112° 9'	111° 9'	113° 3'	112° 1'	112° 1'	115° 4'	97° 6'	108° 5'		
55	0	107° 5'	110° 4'	108° 4'	112° 9'	113° 0'	112° 6'	111° 6'	112° 1'	117° 2'	82° 4'	108° 1'		
		One Scale Division = 0° 00087 parts of the H. F.										HORIZONTAL FORCE.		
M.	S.													
2	0	608° 0'	608° 2'	612° 2'	611° 5'	601° 0'	601° 0'	601° 2'	611° 0'	616° 0'	602° 0'	537° 5'		
7	0	608° 0'	607° 2'	613° 0'	614° 1'	604° 0'	597° 0'	598° 4'	614° 6'	612° 4'	601° 2'	537° 8'		
12	0	608° 6'	608° 0'	613° 0'	608° 0'	604° 0'	597° 0'	596° 0'	605° 1'	612° 6'	601° 3'	529° 0'		
17	0	608° 0'	609° 0'	613° 0'	611° 0'	601° 2'	598° 0'	593° 2'	620° 0'	606° 2'	623° 0'	535° 7'		
22	0	607° 5'	610° 0'	614° 0'	613° 8'	601° 2'	600° 0'	596° 2'	622° 2'	605° 6'	626° 0'	551° 6'		
27	0	606° 2'	607° 5'	614° 2'	613° 7'	603° 5'	602° 5'	601° 4'	623° 2'	609° 2'	625° 2'	562° 7'		
32	0	605° 0'	608° 2'	614° 0'	613° 1'	603° 0'	605° 0'	603° 2'	623° 4'	609° 1'	620° 3'	575° 5'		
37	0	606° 0'	609° 0'	614° 2'	611° 8'	601° 1'	601° 0'	603° 8'	616° 2'	603° 0'	608° 8'	587° 3'		
42	0	604° 8'	607° 2'	617° 0'	611° 0'	601° 9'	598° 5'	617° 0'	616° 8'	602° 2'	597° 5'	592° 8'		
47	0	606° 0'	607° 0'	620° 0'	611° 0'	603° 0'	603° 0'	604° 0'	614° 2'	602° 6'	563° 1'	592° 0'		
52	0	608° 0'	608° 0'	620° 0'	601° 0'	601° 0'	602° 6'	605° 2'	611° 8'	591° 6'	557° 6'	590° 8'		
57	0	608° 2'	608° 2'	616° 0'	605° 0'	598° 0'	601° 0'	605° 1'	616° 6'	590° 2'	549° 2'	588° 7'		
Thermometer		65° 6'	66° 0'	66° 4'	66° 4'	66° 2'	66° 0'	65° 8'	65° 6'	65° 4'	65° 4'			
		One Scale Division = 0° 00063 parts of the V. F.										VERTICAL FORCE.		
M.	S.													
3	0	168° 4'	169° 5'	170° 4'	161° 6'	162° 3'	161° 8'	150° 2'	161° 1'	159° 7'	141° 2'	98° 8'		
8	0	168° 4'	169° 5'	170° 4'	161° 2'	162° 6'	161° 8'	151° 4'	161° 5'	159° 7'	131° 1'	96° 4'		
13	0	168° 6'	169° 5'	170° 5'	161° 2'	162° 6'	159° 6'	151° 2'	160° 9'	159° 1'	131° 1'	98° 5'		
18	0	168° 6'	169° 7'	170° 5'	163° 9'	162° 6'	157° 4'	157° 7'	159° 5'	159° 3'	133° 9'	104° 5'		
23	0	168° 5'	169° 7'	170° 5'	163° 9'	162° 6'	155° 2'	158° 8'	159° 6'	156° 7'	133° 9'	112° 2'		
28	0	168° 5'	169° 7'	170° 6'	163° 9'	161° 8'	153° 2'	161° 7'	159° 4'	157° 0'	131° 5'	116° 2'		
33	0	168° 5'	169° 7'	170° 6'	163° 5'	161° 8'	149° 0'	161° 8'	159° 4'	157° 1'	129° 7'	115° 5'		
38	0	168° 6'	169° 7'	167° 1'	161° 9'	161° 8'	149° 1'	161° 2'	158° 4'	155° 0'	124° 9'	115° 3'		
43	0	168° 6'	169° 7'	167° 3'	162° 0'	161° 8'	149° 1'	160° 7'	158° 8'	152° 7'	121° 5'	121° 7'		
48	0	169° 3'	169° 7'	167° 1'	162° 3'	161° 8'	150° 0'	160° 4'	159° 5'	152° 9'	108° 5'	123° 5'		
53	0	169° 3'	169° 7'	167° 1'	162° 3'	161° 8'	150° 0'	161° 1'	159° 8'	152° 8'	104° 2'	128° 0'		
58	0	169° 3'	169° 7'	164° 9'	162° 3'	161° 8'	150° 1'	160° 2'	159° 8'	153° 1'	102° 4'	130° 0'		
Thermometer		63° 7'	64° 3'	64° 5'	64° 5'	66° 5'	66° 5'	66° 7'	66° 7'	66° 7'	66° 7'	66° 3'		

Increasing Numbers denote decreasing West-erly Declination.

## METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.		Barometer at 32°.	Thermometers.		Wind.		Weather.
			Dry.	Wet.	Direction.	Force.	
D.	H. M.	In.	°	°			
28	10 0	29° 632	67° 8'	60° 2'	E.S.E.	Very light.	Partially clouded, with cir., cir.-strat., and cir.-cum.
	11 0	29° 624	66° 9'	61° 0'	—	Calm.	Partially clouded, with cir., cir.-strat., and cir.-cum.
	12 0	29° 624	66° 9'	61° 0'	E.S.E.	Very light.	Partially clouded, with cir., cir.-strat., and cir.-cum.
	13 0	29° 638	63° 1'	57° 2'	E.S.E.	Very light.	Partially clouded, with cir., cir.-strat., and cir.-cum.
	14 0	29° 654	60° 3'	56° 5'	N.E.	Very light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	15 0	29° 664	61° 1'	57° 3'	N.N.E.	Very light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	16 0	29° 682	63° 7'	57° 6'	N.N.E.	Very light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	17 0	29° 688	62° 7'	56° 3'	N. by W.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	18 0	29° 624	61° 1'	56° 1'	E. by N.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	19 0	29° 638	60° 9'	56° 1'	E. by N.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	20 0	29° 624	57° 2'	54° 6'	N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	21 0	29° 639	58° 5'	54° 9'	N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.
	22 0	29° 621	57° 5'	54° 9'	N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and cir.-cum.

\* At 29° 10', Thermometer of H. F., 65° 9'; of V. F., 65° 3'.

MAGNETICAL OBSERVATIONS.													May 29th and 29th.	
DECLINATION.						Angular Value of one Scale Division = 0.721.								
21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
121.0	115.4	125.5	124.7	121.9	122.5	119.4	105.6	104.2	102.8	103.0	101.8	106.0		
123.6	113.4	124.7	124.4	121.8	123.0	119.6	106.5	103.6	103.0	101.8	105.4	105.9		
122.2	111.5	124.0	125.0	121.7	121.6	119.2	105.9	103.4	102.7	102.6	105.4	106.5		
123.2	119.4	123.6	124.4	121.4	123.1	118.0	104.4	102.2	101.6	102.6	105.5	106.3		
126.2	124.8	123.4	125.5	121.0	122.0	116.6	102.4	103.2	101.1	103.2	104.6	106.4		
129.8	132.4	127.5	124.4	121.0	123.6	113.5	102.6	103.2	101.2	101.4	105.5	106.5		
132.4	133.3	129.4	125.3	121.9	123.8	114.2	103.4	103.4	101.8	102.4	106.4	106.5		
131.8	133.2	130.8	126.8	122.4	122.4	117.2	104.4	103.8	102.2	102.6	105.9	106.3		
137.5	132.1	130.3	122.6	123.6	121.5	115.6	104.4	103.7	101.8	103.6	106.0	106.4		
138.8	129.7	127.7	123.8	122.7	121.2	114.4	104.9	103.2	101.2	101.2	105.6	106.5		
130.4	127.4	128.3	124.2	123.4	119.0	109.6	104.4	103.2	102.8	104.0	106.0	105.6		
121.2	126.6	126.6	122.3	123.6	118.6	107.9	104.4	103.6	102.6	105.2	106.4	106.0		

HORIZONTAL FORCE.												
Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.												
583.7	576.5	577.7	599.8	593.9	592.0	570.0	568.5	596.2	608.4	605.8	612.4	597.8
583.5	577.6	578.0	600.9	597.0	591.8	566.5	570.0	595.3	608.8	604.2	604.2	593.2
585.5	587.1	599.6	602.1	598.0	591.9	562.0	575.0	594.4	608.2	604.8	603.2	601.0
588.1	593.8	599.6	601.4	598.2	590.0	559.0	577.5	594.6	605.6	606.0	600.2	598.7
584.8	595.1	596.6	601.0	598.8	587.0	557.0	583.0	596.2	605.8	603.5	601.0	599.0
581.0	596.2	595.1	602.0	599.0	585.4	559.0	584.0	599.4	608.0	598.8	598.2	599.1
577.5	594.7	594.2	602.0	598.8	585.0	557.0	589.0	602.0	608.8	598.3	599.0	600.3
568.8	596.0	591.0	606.8	599.0	581.9	551.1	590.0	603.8	609.2	601.0	599.2	599.6
560.8	597.2	591.0	601.1	597.2	581.0	556.0	592.5	606.0	608.0	603.3	600.7	600.2
566.5	600.8	591.1	600.9	597.0	578.2	558.5	594.5	605.3	607.8	602.6	601.0	601.0
575.0	603.1	594.0	594.4	594.0	577.8	559.0	594.5	607.2	604.8	601.0	601.0	601.9
576.4	603.5	599.9	592.9	593.4	575.8	564.5	596.0	608.8	605.0	601.2	600.8	601.2
65.2	65.0	64.5	64.5	64.1	63.6	64.0	64.5	65.3	65.3	65.4	65.5	65.6

VERTICAL FORCE.												
Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.												
130.0	132.0	151.8	162.6	165.7	164.4	161.0	163.5	164.4	161.9	162.3	163.5	162.1
129.9	131.2	153.0	163.3	166.2	164.4	161.0	163.5	164.3	162.0	162.3	162.6	163.2
129.2	139.8	153.2	161.1	166.3	164.3	161.0	163.5	164.1	161.3	162.7	162.3	163.8
121.0	137.2	154.0	163.7	166.3	164.2	160.5	163.5	164.1	161.4	162.2	162.9	162.5
117.8	137.6	154.0	163.6	166.3	163.8	161.0	163.5	164.3	161.1	162.3	162.6	163.6
116.5	143.3	154.0	163.2	166.3	163.8	161.9	164.3	164.4	161.5	161.9	162.7	163.6
114.7	145.4	154.6	163.5	165.9	163.8	161.1	164.3	164.2	161.5	162.3	162.4	162.9
109.6	148.7	15.76	164.7	165.9	163.8	160.4	164.9	163.9	162.3	162.6	162.4	162.9
109.6	151.8	15.7	164.5	165.9	163.0	161.8	164.9	163.4	162.5	163.0	163.2	163.6
115.7	155.1	156.6	164.8	165.9	163.0	163.0	164.9	163.1	162.3	163.3	163.0	163.8
116.2	151.0	158.8	164.6	165.3	163.0	163.5	164.9	162.8	162.3	162.7	162.3	163.4
121.9	151.0	161.9	165.5	165.3	161.9	163.5	164.9	162.8	162.2	162.7	162.3	163.4
65.7	65.5	64.9	64.5	64.2	63.4	63.8	64.5	64.7	64.8	64.7	64.8	65.1

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Barometer at 32°.		Thermometers.		Wind.		Weather.			
N.	D.	M.	In.	°	Dry.	Wet.	Direction.	Force.				
28	23	0	29.613	56.6	54.6	N.E. by E.	Light.	Cloudy, with cir., cir-strat., and cir-cum.				
29	0	0	29.591	57.5	54.1	E. by N.	Light.	Cloudy, with cir-cum., cir-strat., and haze; showery.				
1	0	0	29.584	55.7	52.3	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning.				
2	0	0	29.580	56.8	53.1	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze.				
3	0	0	29.548	62.9	58.4	E.N.E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning; showery.				
4	0	0	29.524	60.9	56.4	E.N.E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze.				
5	0	0	29.510	61.5	56.9	E.N.E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze.				
6	0	0	29.521	59.3	55.3	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze.				
7	0	0	29.583	58.3	55.8	N.E. by E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning.				
8	0	0	29.497	62.1	58.3	N.E. by E.	Very light.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning; showery.				
9	0	0	29.462	64.6	61.0	—	Calm.	Cloudy, with cir-cum., cir-strat., and haze; thunder and lightning; showery.				

June 23rd and 24th. MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.	Angular Value of one Scale Division = 0° 721.						DECLINATION.					
	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0 0	105° 5	106° 9	109° 4	109° 3	109° 4	109° 0	108° 0	108° 6	108° 8	109° 4	110° 0	
5 0	105° 6	107° 6	109° 4	109° 4	109° 4	108° 4	108° 4	108° 6	108° 8	109° 6	109° 8	
10 0	104° 1	107° 6	109° 3	109° 5	109° 4	108° 4	108° 3	108° 6	108° 8	109° 9	109° 4	
15 0	105° 7	107° 8	109° 3	110° 0	109° 4	108° 6	108° 3	108° 6	108° 8	109° 6	108° 8	
20 0	105° 3	108° 5	109° 2	110° 2	109° 6	109° 0	108° 3	108° 6	108° 8	109° 6	108° 8	
25 0	105° 2	108° 3	109° 3	109° 6	109° 6	108° 4	108° 4	108° 6	108° 8	109° 6	108° 8	
30 0	106° 2	108° 7	109° 4	109° 6	109° 3	108° 2	108° 4	108° 6	108° 8	109° 5	109° 4	
35 0	105° 6	108° 5	109° 4	109° 4	109° 3	108° 4	108° 4	108° 6	109° 2	110° 0	109° 4	
40 0	106° 1	109° 2	109° 4	109° 6	109° 4	108° 2	108° 5	108° 6	109° 2	110° 0	109° 4	
45 0	106° 4	109° 2	109° 7	109° 6	109° 0	108° 2	108° 7	108° 6	109° 2	110° 0	109° 4	
50 0	106° 4	109° 3	109° 1	109° 4	109° 2	108° 0	108° 6	108° 6	109° 4	110° 0	110° 0	
55 0	107° 1	109° 2	109° 2	109° 5	109° 0	108° 0	108° 5	108° 6	109° 4	110° 2	110° 2	

M. S.	One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
	604° 1	606° 1	601° 0	601° 0	603° 5	602° 0	602° 0	601° 5	601° 5	600° 0	601° 8	
2 0	604° 1	606° 1	601° 0	601° 0	603° 5	602° 0	602° 0	601° 5	601° 5	600° 0	601° 8	
7 0	604° 0	606° 0	604° 1	603° 9	603° 0	602° 3	601° 5	601° 0	601° 0	601° 0	602° 4	
12 0	604° 0	607° 4	604° 0	604° 0	603° 0	602° 0	602° 0	601° 5	601° 0	601° 0	602° 8	
17 0	605° 0	607° 0	601° 2	601° 0	603° 2	602° 0	601° 0	601° 5	601° 0	601° 0	602° 2	
22 0	604° 3	607° 1	603° 7	604° 0	603° 2	602° 2	601° 0	601° 5	601° 0	600° 2	602° 0	
27 0	606° 0	608° 0	604° 0	604° 1	602° 8	601° 7	601° 2	601° 5	600° 8	600° 8	602° 0	
32 0	605° 2	606° 3	604° 2	603° 9	602° 0	601° 5	601° 5	601° 5	600° 5	601° 0	602° 2	
37 0	606° 1	605° 4	604° 5	603° 0	602° 0	601° 6	601° 8	601° 5	600° 2	601° 0	602° 4	
42 0	606° 3	603° 7	604° 1	603° 9	602° 2	601° 7	601° 6	601° 5	600° 2	600° 8	602° 5	
47 0	606° 2	602° 9	604° 2	601° 0	602° 4	601° 5	601° 3	601° 5	600° 2	601° 0	602° 5	
52 0	606° 8	603° 1	604° 3	603° 9	602° 4	601° 5	601° 5	601° 5	600° 0	601° 0	602° 8	
57 0	606° 8	603° 9	605° 3	601° 0	602° 6	601° 3	601° 5	601° 5	600° 5	601° 2	603° 8	

Thermometer	69° 6	69° 8	70° 0	69° 9	69° 4	69° 3	69° 0	68° 6	68° 2	67° 6	67° 1
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M. S.	One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
	153° 3	154° 3	153° 1	153° 1	153° 1	148° 6	148° 6	151° 0	152° 2	153° 2	154° 4	
3 0	153° 3	154° 3	153° 1	153° 1	153° 1	148° 6	148° 6	151° 0	152° 2	153° 2	154° 4	
8 0	153° 9	154° 3	153° 1	153° 1	151° 9	148° 1	147° 6	151° 0	152° 2	153° 2	154° 6	
13 0	153° 5	154° 3	153° 1	153° 2	151° 9	148° 5	147° 6	151° 0	152° 2	153° 2	154° 6	
18 0	153° 6	154° 3	153° 1	153° 1	151° 9	148° 5	147° 6	151° 0	152° 2	152° 9	154° 6	
23 0	153° 6	153° 8	153° 5	153° 1	152° 0	148° 3	148° 2	151° 4	152° 2	153° 3	154° 6	
28 0	151° 7	153° 8	153° 5	153° 1	152° 0	148° 3	148° 2	151° 4	152° 2	153° 3	154° 6	
33 0	151° 7	153° 8	153° 5	153° 1	151° 9	148° 3	148° 2	151° 4	152° 2	153° 3	154° 1	
38 0	151° 7	153° 7	153° 5	153° 1	151° 9	148° 3	149° 4	151° 4	152° 7	153° 3	154° 1	
43 0	151° 4	153° 6	153° 5	153° 1	151° 0	148° 3	149° 3	151° 4	152° 7	153° 3	154° 3	
48 0	151° 4	153° 1	153° 2	153° 1	150° 9	148° 3	150° 2	151° 9	152° 7	153° 5	154° 4	
53 0	151° 4	153° 1	153° 1	153° 1	151° 1	148° 1	150° 2	152° 2	152° 7	153° 5	154° 3	
58 0	151° 4	153° 1	153° 1	153° 1	151° 1	148° 1	151° 0	152° 2	153° 2	153° 5	154° 4	

Thermometer	68° 3	68° 5	68° 7	68° 6	68° 6	70° 0	70° 0	69° 4	68° 5	68° 0	67° 3
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.					
		Dry.	Wet.	Direction.	Force.						
D. H. M.	In.	°	°								
23 10 0	29° 722	70° 7	61° 1	S.W. by S.	Very light.	Clear.					
11 0	29° 723	67° 6	62° 1	S.W. by S.	Very light.	Clear.					
12 0	29° 722	67° 5	62° 2	S.W.	Very light.	Clear.					
13 0	29° 736	61° 4	60° 0	S.W.	Very light.	Clear.					
14 0	29° 753	61° 1	58° 3	—	Calm.	Clear.					
15 0	29° 753	59° 1	57° 1	—	Calm.	Clear.					
16 0	29° 765	58° 3	56° 4	—	Calm.	Clear.					
17 0	29° 777	58° 1	56° 3	—	Calm.	Clear.					
18 0	29° 775	55° 8	53° 7	—	Calm.	Clear.					
19 0	29° 776	55° 8	52° 9	—	Calm.	Clear.					
20 0	29° 789	53° 2	51° 2	N.W. by N.	Very light.	Clear.					
21 0	29° 793	52° 8	50° 4	—	Calm.	Clear.					

\* At 24° 10', Thermometer of H. F., 71° 6'; of V. F., 70° 3'.

ION.

19°.	20°.
8c. Div.	8c. Div.
109°4	110°0
109°6	109°8
109°9	109°4
109°6	108°8
109°6	108°8
109°5	109°4
110°0	109°4
110°0	109°4
110°0	109°4
110°0	110°0
110°2	110°2

MAGNETICAL OBSERVATIONS. June 23rd and 24th.

DECLINATION. Angular Value of one Scale Division = 0'721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.	8c. Div.
110°0	110°4	112°3	115°5	117°4	117°8	115°5	111°4	106°4	102°5	102°4	103°4	105°4
110°0	110°8	112°4	115°9	117°0	117°4	115°4	111°3	106°2	102°5	102°5	103°4	105°6
110°0	110°8	112°6	116°2	118°2	117°5	115°4	110°9	105°6	102°2	102°9	103°4	105°8
110°2	111°2	113°3	116°3	118°1	117°5	115°4	110°0	105°4	102°4	102°9	103°6	106°0
110°2	111°2	113°4	116°4	118°4	117°4	115°1	110°0	105°0	102°1	102°9	103°2	105°8
110°0	111°2	113°8	116°4	118°4	117°4	114°6	109°7	104°5	102°2	101°2	103°8	105°8
110°0	111°4	114°2	116°5	118°0	117°4	114°4	109°4	104°4	102°2	101°2	101°0	106°0
109°4	111°4	114°6	116°8	118°2	116°8	113°5	109°2	104°0	102°2	101°4	101°2	106°4
109°2	111°7	114°5	116°8	118°4	116°6	113°2	108°4	103°4	102°2	101°4	101°8	106°6
110°0	112°0	114°6	117°2	118°2	116°4	112°4	108°2	103°4	102°2	101°4	105°2	106°8
110°4	111°8	114°6	117°3	118°0	116°3	112°3	107°5	103°3	102°2	101°2	105°4	107°0
110°4	111°7	115°4	117°4	118°0	116°2	111°7	107°2	103°0	102°4	101°4	105°4	107°4

AL. FORCE.

600°0	601°8
601°0	602°1
601°0	602°8
601°0	602°2
600°2	602°0
600°8	602°0
601°0	602°2
601°0	602°4
600°8	602°5
601°0	602°5
601°0	602°8
601°2	603°8
67°6	67°1

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

603°2	605°8	609°4	612°8	611°0	604°6	598°0	593°0	593°5	595°0	602°0	607°8	613°8
603°4	606°0	609°5	612°8	610°0	601°0	598°0	593°0	593°5	595°7	602°8	608°2	613°5
604°2	606°2	610°1	613°0	609°0	601°0	597°4	593°0	593°0	596°0	603°0	609°8	614°4
605°0	606°4	611°1	613°0	609°0	603°0	596°6	593°0	593°0	597°2	601°2	610°8	615°2
604°4	606°8	611°2	613°5	608°0	603°0	596°0	593°0	593°8	598°0	601°2	610°8	613°2
603°8	607°4	611°1	613°0	608°0	601°8	595°0	593°0	594°8	598°3	605°0	610°4	613°5
601°5	607°6	611°6	613°1	607°7	601°0	594°5	593°0	593°8	599°0	601°2	610°2	614°0
604°8	607°2	611°2	612°2	607°2	601°2	594°1	593°0	593°5	599°2	607°8	610°8	614°2
604°8	607°3	612°0	611°8	607°0	600°2	593°8	593°0	593°1	599°8	606°2	611°2	614°2
603°0	607°4	612°1	611°3	606°4	600°0	593°5	591°0	593°0	600°0	607°0	611°4	614°5
605°8	607°9	612°1	610°7	606°0	600°0	593°5	593°5	593°5	601°0	607°4	613°0	614°2
605°8	608°1	612°1	610°7	605°0	598°9	593°0	593°8	594°0	601°9	608°0	613°2	614°8
66°6	66°2	65°5	65°3	66°1	67°2	67°9	68°5	69°2	69°4	70°0	70°3	71°4

VERTICAL FORCE.

153°2	151°4
153°2	154°6
153°2	151°6
152°9	154°6
153°3	154°6
153°3	154°6
153°3	154°1
153°3	154°1
153°3	154°3
153°5	154°3
153°5	154°3
153°5	154°1
68°0	67°3

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature 1°64.

155°1	155°5	157°1	158°9	158°3	156°3	155°6	154°9	152°3	151°8	150°3	149°6	150°5
154°8	155°5	157°1	158°9	158°3	156°3	155°6	154°6	151°9	151°8	150°0	149°6	150°5
154°8	155°5	157°1	158°9	157°5	156°2	155°6	154°6	151°6	151°8	150°0	149°9	149°9
154°8	155°5	157°6	158°9	157°5	156°2	155°6	154°6	151°8	151°8	150°0	149°9	150°6
154°8	155°5	157°6	158°9	157°4	156°2	155°7	154°6	151°3	151°8	150°0	149°9	150°1
154°9	155°5	157°6	158°9	157°4	156°2	155°1	153°9	151°3	151°5	150°0	149°9	150°1
154°6	156°9	157°6	158°9	157°4	156°2	155°1	153°9	151°3	151°3	149°1	149°4	150°1
154°6	157°2	157°6	158°9	157°4	156°2	155°1	153°9	151°3	151°3	149°1	149°4	150°1
154°6	156°6	158°4	158°9	157°4	156°2	154°9	153°1	151°3	150°8	150°0	151°1	150°1
154°6	156°6	158°4	158°9	157°4	155°9	154°9	153°1	151°3	150°8	149°8	150°2	150°1
155°1	156°6	158°4	158°7	157°4	155°9	154°9	153°1	151°3	150°8	149°6	150°2	150°1
155°1	157°1	158°9	158°4	157°2	155°6	154°9	152°3	151°5	150°3	149°6	150°7	150°1
67°0	66°7	66°1	65°5	65°7	66°3	66°6	67°5	68°2	68°5	68°7	69°3	70°0

Westerly Declination,

and increasing Horizontal and Vertical Force.

ther.

Mean Gottingen Time.	Barometer at 32°	Thermometers.		Wind.		Weather.
D. H. M.	In.	Dry.	Wet.	Direction.	Force.	
23 22 0	29°809	51°4	49°2	—	Calm.	Clear.
23 0 0	29°824	51°4	49°4	—	Calm.	Clear.
24 0 0	29°844	57°4	54°9	—	Calm.	Clear.
1 0 0	29°862	64°1	59°9	—	Calm.	Clear.
2 0 0	29°869	66°7	62°1	S.W.	Nearly calm.	Clear.
3 0 0	29°862	69°1	63°8	S.W.	Very light.	Clear.
4 0 0	29°849	71°7	65°7	S.W.	Very light.	Clear.
5 0 0	29°844	72°7	67°8	S.W.	Very light.	Clear.
6 0 0	29°831	72°3	65°2	S.W.	Very light.	Clear.
7 0 0	29°827	72°3	63°1	S.W. by S.	Very light.	Clear.
8 0 0	29°817	73°4	64°3	S.W. by S.	Very light.	Clear.
9 0 0	29°804	73°7	66°6	S.W. by S.	Very light.	Clear.

METEOROLOGICAL OBSERVATIONS.

Mean Gottingen Time.	Barometer at 32°	Thermometers.		Wind.		Weather.
D. H. M.	In.	Dry.	Wet.	Direction.	Force.	
23 22 0	29°809	51°4	49°2	—	Calm.	Clear.
23 0 0	29°824	51°4	49°4	—	Calm.	Clear.
24 0 0	29°844	57°4	54°9	—	Calm.	Clear.
1 0 0	29°862	64°1	59°9	—	Calm.	Clear.
2 0 0	29°869	66°7	62°1	S.W.	Nearly calm.	Clear.
3 0 0	29°862	69°1	63°8	S.W.	Very light.	Clear.
4 0 0	29°849	71°7	65°7	S.W.	Very light.	Clear.
5 0 0	29°844	72°7	67°8	S.W.	Very light.	Clear.
6 0 0	29°831	72°3	65°2	S.W.	Very light.	Clear.
7 0 0	29°827	72°3	63°1	S.W. by S.	Very light.	Clear.
8 0 0	29°817	73°4	64°3	S.W. by S.	Very light.	Clear.
9 0 0	29°804	73°7	66°6	S.W. by S.	Very light.	Clear.

July 21st and 22nd.			MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.			Angular Value of one Scale division = 0° 721.						DECLINATION.						
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.		
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		106° 8'	110° 3'	111° 8'	110° 0'	108° 4'	108° 0'	108° 9'	110° 7'	127° 6'	117° 6'	116° 4'	116° 4'	116° 4'
5	0		106° 8'	110° 4'	111° 9'	109° 7'	108° 4'	108° 0'	109° 0'	111° 4'	127° 4'	116° 4'	116° 2'	116° 2'	116° 2'
10	0		107° 2'	110° 6'	111° 7'	109° 4'	108° 5'	108° 4'	108° 6'	111° 0'	127° 2'	115° 7'	115° 4'	115° 4'	115° 4'
15	0		107° 4'	110° 8'	111° 4'	109° 4'	107° 6'	107° 9'	109° 4'	119° 5'	120° 4'	114° 4'	114° 4'	114° 4'	114° 4'
20	0		107° 4'	110° 8'	111° 4'	109° 4'	107° 7'	108° 0'	110° 0'	123° 4'	116° 4'	114° 2'	114° 2'	114° 2'	114° 2'
25	0		107° 8'	111° 4'	110° 6'	109° 4'	108° 0'	108° 0'	109° 6'	127° 7'	114° 4'	113° 4'	113° 4'	113° 4'	113° 4'
30	0		108° 2'	110° 9'	110° 5'	109° 2'	108° 2'	108° 4'	109° 8'	130° 0'	113° 6'	113° 4'	113° 5'	113° 5'	113° 5'
35	0		108° 6'	110° 2'	110° 1'	109° 4'	109° 0'	108° 6'	109° 6'	128° 4'	113° 6'	113° 2'	113° 2'	113° 2'	113° 2'
40	0		109° 2'	111° 0'	110° 4'	109° 2'	109° 6'	108° 4'	109° 6'	128° 4'	115° 4'	112° 6'	112° 6'	112° 6'	112° 6'
45	0		109° 5'	111° 2'	110° 4'	108° 4'	109° 7'	108° 9'	109° 9'	130° 2'	117° 4'	112° 4'	112° 4'	112° 4'	112° 4'
50	0		109° 8'	111° 3'	110° 4'	108° 6'	108° 1'	108° 9'	110° 0'	127° 6'	118° 4'	112° 4'	112° 4'	112° 4'	112° 4'
55	0		110° 1'	111° 4'	110° 4'	108° 6'	108° 2'	109° 0'	110° 3'	127° 0'	118° 4'	114° 2'	114° 2'	114° 2'	114° 2'
			One Scale Division = '000087 parts of the H. F.												
M.	S.		HORIZONTAL FORCE.												
2	0		593° 8'	593° 2'	589° 7'	583° 0'	587° 5'	590° 8'	591° 5'	597° 0'	586° 5'	585° 0'	594° 0'	594° 0'	594° 0'
7	0		592° 0'	593° 9'	589° 5'	584° 0'	587° 6'	590° 4'	588° 5'	597° 0'	589° 0'	585° 1'	595° 2'	595° 2'	595° 2'
12	0		592° 0'	593° 2'	588° 0'	581° 2'	587° 0'	590° 2'	588° 0'	600° 0'	591° 0'	585° 0'	592° 8'	592° 8'	592° 8'
17	0		592° 0'	593° 6'	586° 0'	583° 2'	587° 0'	591° 0'	592° 0'	595° 8'	592° 0'	584° 2'	588° 8'	588° 8'	588° 8'
22	0		591° 9'	593° 8'	584° 0'	583° 0'	588° 0'	591° 0'	594° 0'	598° 0'	587° 0'	585° 0'	587° 6'	587° 6'	587° 6'
27	0		593° 5'	595° 0'	585° 0'	583° 0'	589° 0'	590° 8'	597° 0'	597° 0'	584° 0'	585° 4'	590° 2'	590° 2'	590° 2'
32	0		591° 2'	593° 2'	586° 0'	582° 8'	589° 5'	591° 0'	597° 8'	594° 0'	578° 0'	586° 0'	588° 2'	588° 2'	588° 2'
37	0		596° 1'	593° 0'	583° 2'	586° 0'	589° 0'	589° 8'	598° 5'	596° 5'	577° 5'	587° 5'	587° 2'	587° 2'	587° 2'
42	0		596° 4'	592° 2'	583° 0'	585° 8'	593° 0'	589° 4'	599° 0'	583° 0'	577° 5'	588° 2'	586° 2'	586° 2'	586° 2'
47	0		596° 4'	591° 8'	582° 4'	586° 5'	593° 2'	591° 0'	598° 0'	581° 5'	579° 0'	588° 4'	586° 0'	586° 0'	586° 0'
52	0		596° 6'	589° 0'	584° 6'	587° 0'	593° 1'	591° 4'	597° 0'	582° 0'	581° 5'	588° 0'	585° 8'	585° 8'	585° 8'
57	0		595° 0'	589° 1'	584° 1'	587° 2'	592° 1'	591° 0'	597° 0'	583° 0'	581° 0'	592° 0'	584° 2'	584° 2'	584° 2'
Thermometer			79° 7'	79° 2'	79° 0'	78° 5'	78° 0'	77° 5'	77° 4'	77° 3'	76° 9'	76° 6'	76° 4'	76° 4'	76° 4'
			One Scale Division = '000063 parts of the V. F.												
M.	S.		VERTICAL FORCE.												
3	0		134° 6'	135° 0'	134° 2'	134° 4'	134° 4'	133° 3'	132° 5'	133° 7'	120° 9'	128° 1'	129° 5'	129° 5'	129° 5'
8	0		134° 6'	134° 5'	134° 4'	134° 4'	133° 7'	133° 3'	132° 6'	132° 7'	120° 6'	128° 1'	129° 5'	129° 5'	129° 5'
13	0		134° 3'	134° 2'	134° 1'	134° 4'	133° 7'	133° 3'	132° 5'	130° 4'	119° 3'	128° 1'	128° 6'	128° 6'	128° 6'
18	0		134° 3'	134° 2'	134° 4'	134° 4'	133° 7'	133° 3'	132° 5'	129° 0'	119° 3'	129° 2'	128° 6'	128° 6'	128° 6'
23	0		134° 3'	134° 6'	134° 4'	134° 4'	133° 7'	133° 3'	133° 1'	129° 0'	119° 3'	129° 2'	128° 7'	128° 7'	128° 7'
28	0		134° 9'	134° 6'	134° 4'	134° 4'	134° 0'	133° 3'	133° 7'	126° 7'	120° 4'	129° 5'	129° 5'	129° 5'	129° 5'
33	0		134° 9'	134° 6'	134° 4'	134° 4'	134° 0'	133° 5'	133° 7'	124° 8'	122° 8'	129° 5'	129° 5'	129° 5'	129° 5'
38	0		135° 4'	134° 6'	134° 1'	134° 4'	134° 2'	133° 5'	133° 7'	123° 6'	121° 3'	129° 7'	130° 7'	130° 7'	130° 7'
43	0		135° 4'	134° 6'	134° 4'	134° 6'	133° 4'	133° 5'	133° 7'	123° 6'	125° 6'	129° 7'	131° 0'	131° 0'	131° 0'
48	0		135° 4'	134° 6'	134° 4'	134° 6'	133° 4'	132° 5'	133° 7'	125° 3'	127° 8'	130° 1'	131° 0'	131° 0'	131° 0'
53	0		135° 4'	134° 0'	134° 4'	134° 6'	133° 4'	132° 5'	133° 7'	124° 4'	128° 1'	130° 1'	131° 0'	131° 0'	131° 0'
58	0		135° 0'	134° 4'	134° 4'	134° 6'	133° 3'	132° 5'	133° 7'	122° 1'	128° 1'	130° 1'	131° 4'	131° 4'	131° 4'
Thermometer			78° 4'	78° 4'	78° 0'	77° 7'	78° 0'	78° 1'	77° 9'	78° 0'	78° 0'	77° 5'	77° 4'	76° 0'	76° 0'
Increasing numbers denote decreasing Westerly Declination.															
METEOROLOGICAL OBSERVATIONS.															
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.							
				Dry.	Wet.	Direction.	Force.								
D.	H.	M.	In.	°	°										
21	10	0	29° 406	80° 3'	72° 8'	S.W.	Light.	Cloudy, with cir.-cum. and strat.							
	11	0	29° 426	78° 2'	72° 0'	—	Calm.	Partially clouded, with cir.-cum. and strat.							
	12	0	29° 419	75° 1'	69° 6'	—	Calm.	Partially clouded, with cir.-cum. and strat.							
	13	0	29° 427	73° 3'	68° 2'	—	Calm.	Partially clouded, with cir.-cum. and strat.							
	14	0	29° 422	70° 9'	66° 8'	—	Calm.	Cloudy, with cir.-cum. and strat.							
	15	0	29° 424	68° 9'	64° 9'	—	Calm.	Cloudy, with cir.-cum. and strat.							
	16	0	29° 440	67° 7'	64° 9'	—	Calm.	Cloudy, with cir.-cum. and strat.							
	17	0	29° 432	65° 7'	63° 9'	—	Calm.	Partially clouded, with cir.-cum. and strat.							
	18	0	29° 432	67° 3'	64° 5'	—	Calm.	Cloudy, with cir.-cum. and strat.; constant lightning.							
	19	0	29° 438	66° 3'	64° 6'	—	Calm.	Cloudy, with cir.-cum. and strat.; constant lightning.							
	20	0	29° 448	65° 8'	64° 3'	—	Calm.	Cloudy, with cir.-cum. and strat.; constant lightning.							
	21	0	29° 453	66° 7'	65° 4'	—	Calm.	Cloudy, with cir.-cum. and strat.; constant lightning; rain.							

\* At 22° 10', Thermometer of H. F., 79° 0'; of V. F., 77° 0'.



August 27th and 28th, MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.		Angular Value of One Scale Division = 0° 721.						DECLINATION.				
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	107° 5	108° 9	110° 4	107° 9	109° 5	117° 4	111° 6	109° 4	108° 4	110° 4	111° 5
5	0	107° 9	108° 6	110° 4	108° 4	109° 4	116° 2	110° 5	109° 4	108° 4	110° 4	109° 3
10	0	108° 4	110° 1	110° 4	109° 3	109° 4	115° 9	110° 3	110° 4	108° 8	110° 4	106° 4
15	0	109° 5	110° 2	110° 4	109° 4	109° 8	115° 8	110° 4	109° 8	108° 8	110° 3	103° 4
20	0	108° 9	110° 3	110° 3	109° 6	110° 4	117° 4	109° 2	108° 8	108° 6	109° 9	118° 3
25	0	108° 9	110° 4	110° 3	109	109° 8	118° 4	109° 2	109° 4	109° 6	109° 6	106° 4
30	0	108° 9	110° 4	110° 4	109° 4	110° 2	118° 3	109° 6	109° 4	109° 2	110° 2	108° 3
35	0	109° 0	110° 2	110° 0	109° 0	110° 4	116° 4	109° 6	109° 4	108° 8	110° 6	110° 4
40	0	108° 9	110° 2	108° 9	109° 4	110° 6	113° 0	109° 6	109° 6	110° 0	111° 0	111° 6
45	0	108° 9	110° 1	108° 5	109° 4	113° 7	111° 4	109° 6	109° 4	110° 4	111° 4	111° 4
50	0	109° 2	110° 2	107° 9	109° 2	118° 4	111° 4	109° 5	109° 0	111° 4	112° 0	116° 2
55	0	109° 0	110° 4	107° 9	109° 2	117° 8	111° 4	109° 6	108° 4	111° 4	111° 8	117° 4

M. S.		One Scale Division = 000087 parts of the H. F.						HORIZONTAL FORCE.				
		615° 0	617° 0	599° 0	599° 0	603° 0	598° 5	587° 2	600° 0	601° 6	600° 0	598° 0
2	0	615° 0	617° 0	599° 0	599° 0	603° 0	598° 5	587° 2	600° 0	601° 6	600° 0	598° 0
7	0	612° 0	615° 0	598° 2	598° 5	601° 2	596° 0	583° 1	598° 8	601° 8	601° 5	596° 0
12	0	611° 0	615° 0	597° 2	601° 0	602° 0	594° 0	580° 2	599° 6	602° 2	601° 0	594° 0
17	0	610° 5	615° 0	598° 0	606° 0	600° 2	589° 5	590° 8	601° 8	602° 2	601° 7	593° 9
22	0	609° 2	614° 5	601° 0	608° 0	598° 0	587° 0	591° 8	602° 8	600° 0	600° 0	596° 9
27	0	609° 2	611° 0	600° 0	607° 0	596° 0	587° 5	592° 8	602° 4	602° 0	599° 0	598° 1
32	0	610° 0	609° 8	602° 0	605° 0	595° 0	587° 0	595° 8	602° 8	600° 8	600° 0	598° 4
37	0	609° 8	608° 5	601° 5	603° 0	593° 9	584° 0	595° 0	601° 2	599° 4	600° 0	600° 0
42	0	611° 4	608° 4	600° 0	603° 8	593° 0	582° 0	596° 0	599° 8	600° 0	600° 0	600° 2
47	0	611° 0	605° 0	600° 0	603° 0	593° 0	583° 0	597° 8	600° 2	599° 8	599° 0	600° 0
52	0	613° 0	602° 0	600° 0	602° 9	598° 0	581° 0	598° 8	600° 2	600° 8	599° 0	598° 0
57	0	614° 2	599° 0	599° 0	603° 0	599° 0	584° 5	599° 8	601° 2	600° 6	599° 1	594° 0

Thermometer	70° 5	70° 4	70° 7	71° 0	71° 0	70° 5	70° 2	70° 0	69° 4	69° 0	68° 5

M. S.		One Scale Division = 000063 parts of the V. F.						VERTICAL FORCE.				
		149° 9	149° 5	147° 8	143° 0	143° 8	145° 2	148° 0	146° 6	146° 7	147° 4	145° 8
3	0	149° 9	149° 5	147° 8	143° 0	143° 8	145° 2	148° 0	146° 6	146° 7	147° 4	145° 8
8	0	149° 9	149° 5	147° 8	143° 0	143° 8	144° 6	148° 0	146° 6	146° 7	147° 8	144° 7
13	0	149° 8	149° 5	147° 7	143° 4	143° 8	144° 6	148° 0	146° 6	146° 7	147° 9	142° 4
18	0	149° 8	149° 5	147° 7	143° 8	144° 4	144° 6	148° 0	146° 6	146° 7	147° 5	139° 2
23	0	149° 8	148° 9	147° 7	143° 8	144° 4	144° 6	148° 0	145° 9	146° 7	147° 5	139° 0
28	0	149° 8	148° 9	147° 7	143° 8	144° 4	144° 6	148° 0	145° 9	146° 7	147° 5	138° 7
33	0	149° 6	148° 6	147° 7	143° 8	145° 0	144° 6	148° 0	145° 9	146° 7	147° 5	136° 7
38	0	149° 6	148° 6	147° 7	143° 8	145° 6	145° 0	148° 0	145° 9	147° 4	147° 5	136° 9
43	0	149° 3	148° 4	146° 9	143° 8	145° 8	146° 3	147° 3	145° 9	147° 4	147° 4	137° 3
48	0	149° 3	147° 9	146° 5	143° 8	145° 8	147° 2	147° 3	145° 9	147° 4	146° 2	136° 2
53	0	149° 3	147° 9	144° 1	143° 8	145° 8	147° 2	147° 3	146° 3	147° 4	146° 2	135° 4
58	0	149° 3	147° 8	144° 1	143° 8	145° 8	148° 0	146° 7	146° 3	147° 4	146° 2	135° 0

Thermometer	69° 4	69° 5	72° 2	72° 2	71° 4	70° 8	70° 7	70° 5	70° 0	69° 7	69° 7

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
27	10	0	29° 613	64° 6	58° 6	S.S.W.	Very light.	Nearly clear, with cir.-cum. and cir.-strat.			
	11	0	29° 610	65° 5	59° 5	S.S.W.	Very light.	Clear, with light cir.-cum. and cir.-strat.			
	12	0	29° 618	65° 5	59° 9	S.S.W.	Very light.	Nearly clear, with cir.-cum. and cir.-strat.			
	13	0	29° 612	59° 0	55° 1	—	Calm.	Nearly clear, with cir.-cum. and cir.-strat.			
	14	0	29° 626	58° 5	56° 3	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	15	0	29° 628	56° 5	54° 5	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	16	0	29° 629	54° 6	52° 9	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	17	0	29° 643	53° 1	51° 7	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	18	0	29° 652	53° 2	57° 0	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	19	0	29° 645	52° 4	50° 2	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	20	0	29° 641	49° 5	47° 8	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			
	21	0	29° 650	47° 3	45° 5	—	Calm.	Clear, with light cir.-cum. and cir.-strat.			

\*At 28° 10', Thermometer of H. F., 71° 0'; of V. F., 70° 2.



MAGNETICAL OBSERVATIONS.

August 27th and 28th.

DECLINATION.

Angular Value of One Scale Division = 0".721.

19°.		20°.		21°.		22°.		23°.		24°.		25°.		26°.		27°.		28°.		29°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5	110.4	111.5
110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3	110.4	109.3
110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4	110.4	106.4
109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3	109.9	104.3
109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4	109.6	106.4
110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3	110.2	108.3
110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4	110.6	110.4
111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6	111.0	111.6
111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4	111.4	114.4
112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2	112.0	116.2
111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4	111.8	117.4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

590.0	592.0	599.2	597.0	595.0	585.0	580.0	570.0	571.8	571.2	582.8	591.5	598.8
587.0	595.0	599.0	596.8	594.2	585.0	578.2	572.0	570.2	569.2	583.2	593.0	600.0
587.8	596.5	600.2	596.8	593.5	585.0	580.0	573.0	571.8	570.2	584.1	595.0	600.0
584.2	598.8	601.0	598.0	592.0	583.2	579.0	574.5	572.0	570.2	585.9	593.0	600.0
583.6	599.0	601.4	598.2	593.0	580.0	580.0	573.5	571.2	570.0	585.0	593.8	601.0
582.0	598.8	601.2	597.5	592.5	578.8	576.0	574.4	571.2	570.2	585.0	596.0	601.0
585.0	598.7	601.2	597.0	593.0	578.0	573.5	572.0	569.6	578.2	591.0	597.0	605.0
584.0	599.0	601.0	597.0	591.0	578.8	574.0	570.0	572.8	577.2	591.0	596.0	605.2
585.0	599.2	602.0	597.5	590.0	578.5	574.0	568.0	572.0	577.0	593.5	595.5	606.0
589.0	599.0	602.0	597.6	589.0	578.0	570.0	568.6	572.8	580.0	593.9	594.2	604.0
587.9	598.4	601.0	597.6	589.0	578.5	571.5	570.0	571.0	584.2	593.0	596.0	604.0
591.1	598.2	598.5	595.2	588.0	581.5	569.6	570.0	571.8	584.2	591.4	598.0	606.0

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

135.0	134.0	133.5	130.1	128.8	118.5	118.2	115.9	115.7	118.6	118.2	119.1	119.0
135.0	134.0	133.5	130.2	128.8	118.5	118.2	116.4	115.7	117.7	118.2	119.7	119.0
135.0	134.5	133.5	130.2	128.8	118.5	118.2	116.8	115.7	117.7	118.2	119.7	119.0
135.0	134.2	133.7	131.1	128.9	118.5	118.2	116.8	115.7	118.1	118.2	119.7	119.0
135.8	134.2	133.7	131.5	128.9	118.5	118.2	116.6	115.6	118.1	118.2	119.7	119.0
135.8	134.2	133.7	131.5	128.9	118.5	117.1	116.6	116.3	119.3	118.2	119.7	118.8
137.2	134.0	133.7	130.2	128.9	118.6	116.6	116.0	116.3	118.7	118.3	119.7	119.0
136.1	134.0	133.6	130.4	128.7	118.6	116.2	116.0	116.3	118.7	119.4	119.7	119.0
136.1	134.0	133.6	130.4	128.7	118.6	116.2	115.7	116.3	118.0	119.4	119.7	119.0
136.1	134.0	133.6	128.3	128.7	118.6	116.2	115.7	116.3	118.0	119.5	119.5	119.5
134.2	133.9	133.3	128.3	128.5	118.6	116.2	115.8	116.3	119.0	119.5	118.7	119.5
131.2	133.9	133.0	128.8	128.5	118.9	115.9	115.7	116.9	118.2	119.5	119.0	119.5

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean G. Ringen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
H. M.	In.	°	°			
27 22 0	29.653	48.0	46.1	—	Calm.	Clear.
23 0 0	29.658	48.8	46.8	—	Calm.	Clear.
28 0 0	29.658	47.5	45.6	—	Calm.	Clear.
1 0 0	29.665	51.0	51.4	—	Calm.	Clear.
2 0 0	29.665	62.0	57.8	—	Calm.	Clear.
3 0 0	29.672	63.8	60.1	—	Calm.	Clear.
4 0 0	29.667	66.1	61.1	—	Calm.	Clear.
5 0 0	29.663	67.8	60.1	—	Calm.	Clear.
6 0 0	29.653	68.1	60.7	—	Calm.	Clear.
7 0 0	29.647	68.3	59.3	—	Calm.	Clear.
8 0 0	29.630	69.0	60.2	—	Calm.	Clear.
9 0 0	29.618	68.1	59.3	—	Calm.	Clear.

September 22nd and 23rd.		MAGNETICAL OBSERVATIONS												
Mean Gottingen Time.		Angular Value of one Scale Division = 0° 721.										DECLINATION.		
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.		
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	112° 4	113° 4	112° 8	112° 4	111° 4	110° 6	109° 4	110° 1	111° 6	120° 0	112° 0		
5	0	112° 6	113° 4	112° 5	112° 1	111° 5	110° 5	108° 8	110° 0	114° 3	119° 3	119° 3		
10	0	113° 2	113° 4	112° 6	112° 7	111° 6	110° 6	109° 0	110° 2	113° 8	117° 9	119° 3		
15	0	113° 4	113° 4	112° 4	112° 5	111° 4	110° 4	109° 5	111° 5	114° 4	117° 8	117° 9		
20	0	113° 4	113° 4	112° 4	112° 5	111° 5	110° 4	108° 9	111° 5	114° 6	117° 0	117° 5		
25	0	113° 6	113° 4	112° 8	113° 4	111° 4	110° 4	108° 8	112° 6	115° 4	114° 9	119° 6		
30	0	113° 6	113° 4	112° 8	112° 5	109° 6	109° 9	109° 4	113° 0	115° 2	114° 3	119° 6		
35	0	113° 8	112° 8	112° 8	112° 4	110° 0	109° 7	110° 4	113° 8	118° 4	113° 6	118° 4		
40	0	114° 2	112° 6	113° 0	112° 2	110° 0	109° 7	111° 0	115° 4	119° 4	112° 6	117° 9		
45	0	114° 2	112° 4	112° 4	111° 4	110° 4	110° 2	106° 2	116° 2	119° 6	111° 9	117° 3		
50	0	114° 6	112° 4	112° 6	111° 4	110° 5	110° 4	106° 0	116° 2	119° 5	111° 7	116° 8		
55	0	113° 4	112° 0	112° 4	111° 4	110° 6	110° 2	108° 4	116° 4	120° 0	113° 5	117° 4		

M. S.		One Scale Division = 000087 parts of the H. F.										HORIZONTAL FORCE.	
2	0	607° 4	613° 8	615° 0	610° 2	608° 9	613° 6	616° 1	611° 0	611° 0	608° 0	611° 5	
7	0	606° 8	613° 8	615° 0	610° 0	610° 0	613° 6	615° 5	611° 2	611° 4	608° 0	609° 0	
12	0	607° 0	613° 0	614° 2	609° 0	610° 2	614° 0	616° 0	612° 0	611° 0	608° 0	606° 0	
17	0	609° 2	613° 8	614° 8	608° 9	610° 2	614° 1	616° 1	609° 8	610° 0	606° 5	603° 0	
22	0	611° 2	615° 0	613° 0	607° 6	611° 0	615° 7	616° 9	609° 0	610° 0	607° 2	603° 0	
27	0	611° 2	615° 5	612° 5	609° 0	610° 4	616° 4	616° 0	609° 0	611° 0	604° 0	605° 0	
32	0	612° 2	616° 5	613° 2	608° 2	609° 4	616° 7	615° 7	609° 8	611° 2	603° 0	605° 0	
37	0	612° 6	616° 0	613° 0	607° 8	610° 0	616° 0	616° 0	609° 6	611° 4	604° 0	604° 5	
42	0	612° 8	616° 2	613° 5	608° 2	610° 5	616° 0	616° 4	609° 4	610° 8	607° 1	604° 7	
47	0	612° 2	618° 0	612° 2	608° 4	611° 3	617° 0	615° 8	609° 4	610° 4	609° 5	606° 5	
52	0	612° 8	617° 8	612° 2	608° 7	612° 0	617° 0	614° 2	610° 4	610° 0	610° 2	606° 0	
57	0	615° 0	617° 0	610° 0	609° 0	613° 1	617° 8	613° 2	609° 4	610° 0	612° 5	607° 5	

Thermometer	64° 2	64° 8	64° 8	64° 8	64° 3	63° 5	63° 0	62° 8	62° 4	62° 2	61° 8
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M. S.		One Scale Division = 000063 parts of the V. F.										VERTICAL FORCE.	
3	0	163° 1	162° 0	160° 2	156° 2	157° 8	158° 1	157° 7	157° 6	157° 8	154° 9	158° 8	
8	0	162° 5	161° 4	160° 2	156° 7	157° 8	158° 1	157° 9	157° 5	157° 8	154° 9	155° 9	
13	0	162° 5	161° 6	159° 2	156° 7	157° 7	158° 0	158° 3	157° 5	158° 1	154° 4	156° 1	
18	0	162° 5	161° 6	157° 9	156° 7	157° 7	157° 5	158° 3	157° 7	158° 0	154° 2	156° 1	
23	0	162° 5	161° 6	157° 8	156° 7	157° 7	157° 5	158° 3	157° 7	158° 0	154° 1	154° 4	
28	0	162° 5	161° 6	157° 8	156° 9	157° 7	157° 7	158° 4	157° 7	158° 0	154° 0	154° 3	
33	0	163° 3	161° 6	157° 8	156° 9	157° 7	157° 7	158° 7	157° 7	157° 8	154° 0	154° 2	
38	0	162° 5	160° 8	157° 4	157° 1	157° 7	157° 7	158° 7	157° 9	157° 8	153° 8	154° 5	
43	0	163° 0	161° 3	157° 4	157° 1	157° 7	157° 7	158° 7	157° 9	157° 4	159° 2	154° 6	
48	0	163° 0	161° 3	157° 2	157° 7	158° 5	157° 7	158° 5	157° 9	157° 2	159° 2	156° 2	
53	0	163° 0	161° 3	157° 2	157° 4	158° 4	157° 7	157° 9	157° 9	154° 9	159° 1	156° 2	
58	0	163° 0	161° 3	157° 2	157° 8	158° 2	157° 7	157° 6	157° 9	164° 9	158° 9	156° 3	

Thermometer	62° 6	63° 1	64° 0	64° 5	64° 5	63° 7	63° 4	62° 7	62° 5	62° 5	62° 7
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.

Mean Gottingen Time.			Barometer at 32.	Thermometers.		Wind.		Weather.
D.	H.	M.	In.	Dry.	Wet.	Direction.	Force.	
22	10	0	29° 765	60° 1	54° 9	S.S.W.	Light.	Partially clouded; cir.-cum. and cir.-strat.
	11	0	29° 745	58° 7	54° 7	—	Calm.	Partially clouded; cir.-cum. and cir.-strat.
	12	0	29° 746	53° 8	51° 7	S. by E.	Very light.	Partially clouded; cir.-cum. and cir.-strat.
	13	0	29° 754	51° 9	50° 3	—	Calm.	Clear.
	14	0	29° 748	50° 1	48° 6	—	Calm.	Clear.
	15	0	29° 745	49° 2	47° 8	—	Calm.	Clear.
	16	0	29° 745	50° 6	49° 3	—	Calm.	Clear.
	17	0	29° 734	48° 9	47° 3	—	Calm.	Clear.
	18	0	29° 732	47° 3	46° 3	—	Calm.	Clear.
	19	0	29° 743	46° 1	44° 8	—	Calm.	Clear.
	20	0	29° 732	45° 9	44° 4	—	Calm.	Clear.
	21	0	29° 725	45° 5	44° 0	—	Calm.	Clear.

\* At 23<sup>h</sup> 10<sup>m</sup>, Thermometer of H. F., 62° 0', of V. F., 65° 8'

MAGNETICAL OBSERVATIONS.

September 22nd and 23rd.

DECLINATION.

Angular Value of one Scale Division = 0'.721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.	S. Div.
117°0	114°0	116°4	110°4	114°4	104°8	96°9	97°6	96°9	94°4	98°9	103°6	109°3
120°0	114°4	115°4	111°4	115°4	101°0	97°4	95°8	96°8	94°6	100°4	104°3	108°8
116°6	115°4	114°4	111°6	115°6	96°4	95°4	96°4	95°4	95°8	101°5	105°9	109°5
113°6	114°5	114°0	113°0	115°2	91°0	94°4	98°4	93°4	95°8	102°6	105°6	110°4
117°9	114°4	112°4	113°6	115°4	92°2	93°6	99°2	92°8	96°0	102°3	106°4	109°9
117°8	114°3	112°5	114°5	114°8	93°4	93°2	99°3	91°4	95°6	100°6	106°6	110°7
117°0	114°5	112°5	114°3	114°4	97°4	96°2	99°4	90°0	95°9	99°0	106°5	110°5
114°9	115°4	111°4	111°0	114°2	97°8	96°5	98°3	90°5	96°6	100°0	107°5	111°1
114°3	115°7	110°4	115°4	112°9	98°0	97°4	95°6	93°2	96°6	100°4	107°5	110°7
113°6	116°5	109°4	118°3	110°4	98°0	97°6	96°4	89°0	97°3	101°5	108°0	112°0
117°9	117°0	109°4	114°3	109°2	99°2	95°3	95°4	90°3	97°6	102°4	108°0	112°3
111°7	115°2	108°8	114°4	106°8	98°6	95°4	96°0	92°8	94°3	103°2	108°4	112°4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

608°8	613°5	616°5	611°0	608°0	603°4	602°2	605°0	602°5	611°0	619°0	605°0	612°5
610°0	614°0	615°0	612°0	609°0	603°8	602°0	607°4	602°0	611°2	620°2	607°2	613°4
612°0	616°0	615°0	612°5	609°8	600°2	604°4	607°2	602°0	611°0	627°0	613°5	610°0
613°0	616°0	615°0	611°0	611°5	601°8	605°5	605°1	601°9	611°0	627°0	614°0	617°0
613°5	618°0	615°5	608°9	611°5	598°2	609°2	606°1	601°4	612°0	628°0	612°0	625°0
612°5	618°0	615°2	608°5	610°0	598°2	607°0	606°4	602°4	612°0	620°0	613°2	617°0
613°0	617°5	614°1	607°1	610°5	598°0	604°8	603°6	604°0	612°5	605°8	614°0	621°0
612°5	618°0	614°0	607°5	612°2	600°0	604°0	602°0	604°4	615°0	605°1	609°8	620°0
613°5	618°0	614°0	605°0	610°4	596°0	604°7	604°0	607°2	615°2	602°5	608°8	620°0
613°0	620°0	613°0	604°0	608°5	600°0	608°0	603°6	607°9	616°0	602°2	614°5	614°0
613°0	621°0	613°0	605°0	606°2	597°8	609°0	603°0	605°4	616°0	603°0	615°0	614°0
612°0	619°0	611°0	606°0	604°0	602°2	608°3	601°2	605°0	615°8	603°5	616°0	608°2
61°5	61°0	61°0	60°5	60°5	61°3	62°2	63°0	63°8	64°0	64°5	65°3	66°5*

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

158°2	158°9	157°8	155°3	158°9	160°3	155°6	156°1	156°4	157°6	160°6	161°7	157°0
158°2	158°9	157°8	155°3	158°9	160°3	155°6	156°1	156°4	157°6	161°9	161°2	157°0
158°2	158°9	157°8	156°1	160°5	159°7	156°0	156°1	156°4	157°6	162°7	161°2	156°2
158°2	158°9	157°8	156°8	161°2	157°6	155°8	156°1	157°2	159°6	163°3	159°6	157°5
158°2	158°9	157°8	157°3	161°2	155°8	155°7	156°1	157°2	159°6	163°3	159°6	156°7
158°5	158°9	157°8	157°8	161°2	155°8	156°1	156°1	157°2	159°6	161°7	159°4	156°7
158°5	158°9	157°4	158°3	160°3	154°8	156°1	156°1	157°2	159°9	162°0	157°9	156°1
158°6	158°9	157°4	158°3	160°3	154°2	156°1	156°0	157°2	159°9	161°7	157°9	156°1
158°6	158°9	155°8	158°4	160°3	155°6	156°1	156°9	156°9	160°3	161°7	157°9	156°1
158°8	158°9	155°8	158°9	160°4	154°7	156°1	156°9	156°5	160°5	161°7	157°9	155°3
158°8	158°9	155°6	158°9	160°4	153°6	156°1	156°9	156°5	160°5	161°7	157°9	154°8
62°4	62°0	62°3	62°5	61°3	61°7	62°5	62°6	63°0	63°4	65°7	64°5	65°5*

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Weather.	Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
			Dry.	Wet.	Direction.	Force.	
			°	°			
	D. H. M.	In.	°	°			
	22 0	29°721	45°5	44°2	—	Calm.	Clear.
	23 0	29°719	45°7	44°4	—	Calm.	Clear.
cum. and cir.-strat.	23 0 0	29°720	49°9	48°8	—	Calm.	Cloudy, with cir. cum. and cir.-strat.
cum. and cir.-strat.	1 0	29°720	52°8	51°7	—	Calm.	Cloudy, with cir.-cum. and cir.-strat.
cum. and cir.-strat.	2 0	29°723	58°7	56°3	S.S.W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	3 0	29°729	61°5	58°3	S.S.W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	4 0	29°720	62°9	59°0	S.S.W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	5 0	29°709	65°0	60°9	S.S.W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	6 0	29°695	65°5	60°8	S.W. by S.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	7 0	29°667	66°1	61°5	S.S.W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	8 0	29°654	67°3	62°1	S. by W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.
	9 0	29°636	67°1	61°1	S.S.W.	Very light.	Cloudy, with cir.-cum. and cir.-strat.

October 20th and 21st.		MAGNETICAL OBSERVATIONS.										
Mean Göttingen Time.		Angular Value of one Scale Division = 0".721.					DECLINATION.					
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	109.4	113.5	112.0	107.7	110.4	108.4	108.4	109.7	112.5	107.3	111.9
5	0	109.6	113.7	112.0	108.6	110.8	108.8	108.2	110.0	110.4	107.5	112.4
10	0	110.2	113.7	112.8	109.5	112.0	108.6	107.4	110.2	108.5	108.6	113.3
15	0	110.5	113.6	113.9	110.6	112.5	108.8	108.2	109.6	108.4	109.4	113.0
20	0	111.0	113.6	113.5	110.6	111.2	108.6	109.6	110.2	109.3	111.2	113.0
25	0	111.4	113.4	112.2	109.8	110.0	105.4	111.3	109.4	110.2	111.2	111.8
30	0	112.2	113.2	115.9	109.8	109.2	104.6	111.0	110.1	110.4	112.1	111.4
35	0	112.4	112.9	118.4	109.6	108.4	101.4	110.4	111.9	110.4	113.3	111.2
40	0	112.6	112.5	116.5	110.4	108.4	105.2	110.0	115.9	110.4	111.0	111.6
45	0	113.1	112.4	114.4	111.2	108.4	108.2	109.3	118.1	110.5	112.2	111.8
50	0	113.4	112.4	111.3	111.4	108.8	107.6	109.0	117.4	109.6	111.7	111.6
55	0	113.4	112.3	107.9	110.6	108.4	107.4	109.3	115.4	107.4	111.5	111.4

M. S.		One Scale Division = .000087 parts of the H. F.										
		HORIZONTAL FORCE.										
2	0	619.0	621.6	618.0	618.0	617.2	611.8	611.2	609.5	611.0	609.0	615.3
7	0	619.0	621.0	614.1	617.8	616.0	612.0	611.9	609.0	610.8	610.3	615.2
12	0	620.8	621.2	613.2	618.2	616.8	612.8	611.7	609.5	609.9	610.2	615.5
17	0	622.0	621.5	614.0	618.8	617.2	613.8	608.1	609.6	609.5	612.0	615.7
22	0	622.8	621.1	614.0	618.8	616.8	614.0	607.4	610.1	609.0	611.8	615.3
27	0	623.0	620.5	615.0	618.0	616.2	613.2	609.7	610.0	609.4	611.6	615.0
32	0	623.8	620.1	615.2	618.2	615.0	610.8	611.0	609.6	609.2	611.9	617.2
37	0	624.0	620.0	620.0	617.6	615.2	607.8	611.5	609.0	609.2	611.0	617.8
42	0	624.0	620.0	621.0	617.0	615.0	608.0	611.0	610.0	608.1	611.2	616.9
47	0	624.0	619.0	625.0	616.8	614.2	610.2	610.8	610.0	607.6	611.0	617.0
52	0	624.1	619.0	624.0	617.2	613.2	612.0	609.5	610.9	606.6	612.9	616.7
57	0	623.2	618.0	619.0	617.4	612.2	610.0	609.1	610.8	608.0	613.2	616.6

Thermometer		59.5	59.5	59.5	59.5	59.5	59.2	58.8	58.2	57.5	57.3	57.0
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M. S.		One Scale Division = .000063 parts of the V. F.										
		VERTICAL FORCE.										
3	0	168.7	168.8	166.8	166.5	166.7	167.5	169.1	168.5	164.1	159.0	164.2
8	0	168.7	168.8	166.7	166.5	166.5	167.5	169.1	168.5	163.8	158.2	164.4
13	0	168.7	168.8	166.5	166.5	166.5	167.5	168.5	167.5	163.8	158.2	164.4
18	0	169.1	168.8	166.5	166.6	166.5	167.5	168.5	167.5	163.6	158.1	165.5
23	0	168.8	168.8	166.5	166.9	166.5	167.5	168.5	167.5	163.5	158.1	165.5
28	0	168.8	168.8	166.5	166.9	166.5	167.5	168.5	167.0	163.5	158.1	165.5
33	0	168.8	168.8	166.9	166.9	166.5	167.5	168.5	167.0	163.5	158.1	165.1
38	0	168.8	168.3	167.7	166.9	167.0	167.7	168.5	167.0	162.9	159.1	165.3
43	0	168.8	168.3	167.7	166.9	167.0	168.3	168.5	165.1	162.9	159.5	165.3
48	0	168.8	168.3	167.7	166.9	167.0	168.1	168.5	166.1	162.9	159.5	165.6
53	0	168.8	167.5	167.3	167.1	167.0	168.1	168.5	165.2	162.9	159.5	165.6
58	0	168.8	167.5	166.5	167.0	167.0	168.4	168.5	165.3	161.0	159.6	165.6

Thermometer		58.7	58.8	59.0	59.5	59.5	59.4	59.2	59.0	59.2	59.2	58.9
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.												
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.				
				Dry.	Wet.	Direction.	Force.					
D.	H.	M.	In.	°	°							
20	10	0	29.785	52.8	42.0	W. by S.	Light.	Clear.				
	11	0	29.797	48.5	38.6	W. by S.	Very light.	Clear.				
	12	0	29.821	45.3	36.6	W. by S.	Very light.	Clear.				
	13	0	29.837	43.4	35.0	W. by S.	Very light.	Clear.				
	14	0	29.860	43.0	35.6	N.W. by W.	Very light.	Clear.				
	15	0	29.879	40.6	35.3	—	Calm.	Clear.				
	16	0	29.887	39.9	34.2	N. by W.	Very light.	Clear.				
	17	0	29.898	36.6	32.0	N.	Very light.	Clear.				
	18	0	29.902	32.9	29.4	—	Calm.	Clear.				
	19	0	29.909	31.4	27.5	—	Calm.	Clear.				
	20	0	29.916	30.6	26.9	N.N.W.	Very light.	Light clouds.				
	21	0	29.933	31.2	27.8	—	Calm.	Light clouds.				

\* At 21<sup>h</sup> 10<sup>m</sup>, Thermometer of H. F., 58° 5', of V. F., 55° 5'.

MAGNETICAL OBSERVATIONS.

October 20th and 21st.

DECLINATION.

Angular Value of one Scale Division = 0°721.

DECLINATION.				Angular Value of one Scale Division = 0°721.								
21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
111°8	114°6	115°0	114°6	116°4	118°0	119°4	117°6	113°4	108°2	106°2	107°4	107°9
111°5	114°6	114°6	114°6	116°8	118°4	118°8	117°2	113°4	108°2	106°4	107°6	107°8
108°6	114°3	114°2	115°0	116°8	119°3	118°8	116°4	113°6	107°5	106°5	107°6	108°2
109°4	114°8	114°2	115°0	116°9	120°4	118°2	116°4	112°3	107°4	106°5	107°6	108°4
111°2	115°4	114°4	115°0	116°7	121°5	117°4	115°2	110°6	107°1	106°9	107°6	108°8
111°6	115°6	114°6	115°2	117°2	120°3	117°4	115°2	110°3	107°0	106°9	107°7	109°1
111°4	115°5	114°6	115°0	117°6	120°2	118°6	114°2	110°2	106°5	107°4	107°6	109°1
111°4	114°8	114°6	115°0	117°6	120°2	118°6	114°2	110°0	106°5	107°4	107°9	109°1
111°7	114°4	114°8	115°4	118°0	118°4	118°4	113°6	109°4	106°3	107°4	107°9	109°2
112°0	114°4	114°6	115°7	118°4	118°4	118°6	113°8	109°3	106°0	107°6	107°9	109°4
112°2	114°6	114°6	115°8	118°7	120°3	117°8	113°8	109°0	106°0	107°6	107°9	109°0
111°7	114°5	114°6	116°1	118°0	120°4	118°4	113°4	108°4	106°0	107°4	107°9	109°2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

616°0	615°5	620°5	621°0	617°5	614°8	611°0	603°8	594°1	600°0	604°0	611°0	619°5
615°8	615°5	620°5	621°0	617°7	615°0	611°0	603°4	593°7	601°1	604°0	611°0	618°2
615°8	616°0	620°7	620°8	618°5	613°2	611°0	604°2	594°2	601°8	604°0	612°0	619°0
616°0	616°0	621°0	620°7	618°5	613°0	609°8	602°4	599°0	601°0	606°0	613°0	618°8
616°2	617°5	621°0	621°2	617°0	614°0	608°2	602°0	598°4	603°3	607°1	613°5	619°5
616°1	619°0	621°0	621°5	617°0	614°0	607°4	601°2	598°1	602°1	608°0	614°0	619°0
616°1	619°0	621°0	621°7	617°0	613°2	605°4	600°0	597°7	602°2	609°1	615°0	620°0
616°0	619°0	621°5	619°5	617°0	615°0	605°0	599°8	597°1	603°1	609°2	616°0	621°0
616°0	619°3	620°5	619°2	616°0	613°0	601°8	597°2	597°1	601°3	610°5	617°5	619°8
615°4	619°8	620°5	619°0	616°0	610°0	603°8	597°0	597°0	606°0	610°0	617°5	620°0
614°8	620°5	620°3	619°5	616°0	609°2	603°0	597°0	598°1	603°0	610°0	617°5	621°0
615°0	620°6	620°5	619°0	615°8	611°2	605°0	595°8	599°1	604°0	611°0	618°8	620°5

57°3	57°0	57°7	55°4	54°3	54°0	54°4	54°6	55°1	55°1	55°5	55°5	55°9
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

166°1	167°8	168°9	169°9	170°8	174°1	174°4	173°2	171°2	170°8	172°4	172°5	172°6
166°1	167°9	168°9	169°9	170°8	174°1	174°4	173°2	171°2	170°8	172°2	172°5	172°3
166°1	167°9	168°9	169°9	171°5	174°1	174°4	173°0	171°0	170°8	172°2	172°5	172°3
166°1	167°9	169°0	169°9	171°8	174°1	174°4	173°0	171°9	170°8	172°2	172°5	172°3
166°1	168°0	169°0	170°3	171°8	174°1	174°4	172°8	171°9	170°8	172°3	172°5	172°2
166°3	168°5	169°0	170°5	172°3	174°1	174°4	172°8	171°9	170°8	172°4	172°5	172°2
166°3	168°5	170°2	170°7	172°7	174°9	173°8	172°8	171°7	170°8	172°4	172°5	172°3
166°3	168°5	169°8	170°8	172°7	174°9	173°8	172°1	171°7	171°5	172°6	172°7	172°3
166°3	168°6	169°9	170°8	172°7	174°9	173°8	171°6	171°2	171°5	172°6	172°7	172°3
166°4	168°9	169°9	170°8	173°7	174°9	173°8	171°6	171°2	171°5	172°6	172°8	172°2
166°8	168°9	169°9	170°8	173°7	174°4	173°8	171°1	170°9	172°2	172°5	172°8	173°1
168°1	168°9	169°9	170°8	173°7	174°4	173°8	171°2	170°9	172°3	172°5	172°5	172°5

58°4	57°4	57°2	57°2	56°5	55°2	55°2	55°4	55°5	55°1	55°2	55°5	56°0
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Gettingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
D. H. M.	In.					
20 22 0	29°943	31°0	27°6	—	Calm.	Light clouds.
23 0 0	29°959	33°9	30°5	—	Calm.	Cloudy.
21 0 0	29°956	34°5	30°9	N. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
1 0 0	29°962	35°9	31°7	N. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
2 0 0	29°981	38°1	34°2	N. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
3 0 0	29°961	41°5	37°0	—	Calm.	Cloudy, with cir., cir.-strat., and haze.
4 0 0	29°939	44°0	38°2	E. by S.	Very light.	Cloudy, with cir., cir.-strat., and haze.
5 0 0	29°950	44°9	40°0	E.S.E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
6 0 0	29°938	44°7	39°7	N.E. by E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
7 0 0	29°898	44°1	38°9	E.N.E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
8 0 0	29°882	44°0	38°8	E.N.E.	Very light.	Cloudy, with cir., cir.-strat., and haze.
9 0 0	29°863	43°9	38°9	N.E. by E.	Light.	Cloudy, with cir., cir.-strat., and haze.

November 26th and 27th.		MAGNETICAL OBSERVATIONS.												
Mean Göttingen Time.	Angular Value of one Scale Division = 0 <sup>o</sup> .721.											DECLINATION.		
	10 <sup>o</sup> .	11 <sup>o</sup> .	12 <sup>o</sup> .	13 <sup>o</sup> .	14 <sup>o</sup> .	15 <sup>o</sup> .	16 <sup>o</sup> .	17 <sup>o</sup> .	18 <sup>o</sup> .	19 <sup>o</sup> .	20 <sup>o</sup> .			
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	106 <sup>o</sup> .9	103 <sup>o</sup> .8	116 <sup>o</sup> .0	116 <sup>o</sup> .6	111 <sup>o</sup> .6	106 <sup>o</sup> .0	115 <sup>o</sup> .2	111 <sup>o</sup> .6	111 <sup>o</sup> .4	110 <sup>o</sup> .4	109 <sup>o</sup> .2		
5	0	106 <sup>o</sup> .1	104 <sup>o</sup> .4	101 <sup>o</sup> .9	117 <sup>o</sup> .1	111 <sup>o</sup> .9	109 <sup>o</sup> .4	110 <sup>o</sup> .9	111 <sup>o</sup> .9	111 <sup>o</sup> .2	110 <sup>o</sup> .2	109 <sup>o</sup> .8		
10	0	106 <sup>o</sup> .6	104 <sup>o</sup> .9	98 <sup>o</sup> .3	116 <sup>o</sup> .4	112 <sup>o</sup> .6	113 <sup>o</sup> .0	109 <sup>o</sup> .2	111 <sup>o</sup> .4	110 <sup>o</sup> .4	110 <sup>o</sup> .2	109 <sup>o</sup> .8		
15	0	106 <sup>o</sup> .2	105 <sup>o</sup> .0	106 <sup>o</sup> .2	114 <sup>o</sup> .0	113 <sup>o</sup> .6	111 <sup>o</sup> .2	110 <sup>o</sup> .5	110 <sup>o</sup> .4	110 <sup>o</sup> .6	109 <sup>o</sup> .6	109 <sup>o</sup> .0		
20	0	106 <sup>o</sup> .6	105 <sup>o</sup> .4	109 <sup>o</sup> .4	114 <sup>o</sup> .6	115 <sup>o</sup> .0	110 <sup>o</sup> .0	112 <sup>o</sup> .5	109 <sup>o</sup> .4	111 <sup>o</sup> .0	109 <sup>o</sup> .4	108 <sup>o</sup> .5		
25	0	105 <sup>o</sup> .7	106 <sup>o</sup> .0	110 <sup>o</sup> .4	115 <sup>o</sup> .0	117 <sup>o</sup> .4	112 <sup>o</sup> .4	113 <sup>o</sup> .1	109 <sup>o</sup> .4	111 <sup>o</sup> .3	108 <sup>o</sup> .9	108 <sup>o</sup> .4		
30	0	103 <sup>o</sup> .0	110 <sup>o</sup> .4	110 <sup>o</sup> .5	116 <sup>o</sup> .0	117 <sup>o</sup> .6	116 <sup>o</sup> .4	113 <sup>o</sup> .4	109 <sup>o</sup> .4	110 <sup>o</sup> .8	109 <sup>o</sup> .2	106 <sup>o</sup> .6		
35	0	104 <sup>o</sup> .5	111 <sup>o</sup> .9	118 <sup>o</sup> .4	114 <sup>o</sup> .0	119 <sup>o</sup> .8	116 <sup>o</sup> .6	113 <sup>o</sup> .4	109 <sup>o</sup> .9	110 <sup>o</sup> .4	108 <sup>o</sup> .9	107 <sup>o</sup> .6		
40	0	104 <sup>o</sup> .9	110 <sup>o</sup> .0	110 <sup>o</sup> .4	112 <sup>o</sup> .4	114 <sup>o</sup> .4	116 <sup>o</sup> .0	113 <sup>o</sup> .5	110 <sup>o</sup> .4	110 <sup>o</sup> .2	109 <sup>o</sup> .3	105 <sup>o</sup> .6		
45	0	104 <sup>o</sup> .7	112 <sup>o</sup> .4	107 <sup>o</sup> .5	110 <sup>o</sup> .4	119 <sup>o</sup> .7	115 <sup>o</sup> .9	113 <sup>o</sup> .9	110 <sup>o</sup> .6	110 <sup>o</sup> .2	109 <sup>o</sup> .5	104 <sup>o</sup> .8		
50	0	101 <sup>o</sup> .4	136 <sup>o</sup> .2	111 <sup>o</sup> .3	110 <sup>o</sup> .8	119 <sup>o</sup> .3	116 <sup>o</sup> .0	113 <sup>o</sup> .4	110 <sup>o</sup> .9	110 <sup>o</sup> .4	109 <sup>o</sup> .6	104 <sup>o</sup> .3		
55	0	101 <sup>o</sup> .1	130 <sup>o</sup> .0	113 <sup>o</sup> .5	110 <sup>o</sup> .4	111 <sup>o</sup> .6	117 <sup>o</sup> .9	112 <sup>o</sup> .8	111 <sup>o</sup> .5	110 <sup>o</sup> .3	108 <sup>o</sup> .8	101 <sup>o</sup> .4		

M. S.		One Scale Division = 0 <sup>o</sup> .00087 parts of the H. F.											HORIZONTAL FORCE.	
2	0	623 <sup>o</sup> .9	610 <sup>o</sup> .0	624 <sup>o</sup> .3	607 <sup>o</sup> .0	614 <sup>o</sup> .1	629 <sup>o</sup> .0	629 <sup>o</sup> .0	622 <sup>o</sup> .0	620 <sup>o</sup> .0	621 <sup>o</sup> .5	621 <sup>o</sup> .5		
7	0	621 <sup>o</sup> .6	608 <sup>o</sup> .7	618 <sup>o</sup> .7	611 <sup>o</sup> .8	614 <sup>o</sup> .0	621 <sup>o</sup> .5	626 <sup>o</sup> .0	622 <sup>o</sup> .5	620 <sup>o</sup> .2	621 <sup>o</sup> .5	621 <sup>o</sup> .0		
12	0	619 <sup>o</sup> .2	609 <sup>o</sup> .1	604 <sup>o</sup> .9	614 <sup>o</sup> .0	615 <sup>o</sup> .0	620 <sup>o</sup> .8	622 <sup>o</sup> .0	622 <sup>o</sup> .0	622 <sup>o</sup> .0	621 <sup>o</sup> .5	621 <sup>o</sup> .5		
17	0	616 <sup>o</sup> .2	607 <sup>o</sup> .9	602 <sup>o</sup> .8	613 <sup>o</sup> .0	615 <sup>o</sup> .2	629 <sup>o</sup> .0	619 <sup>o</sup> .5	622 <sup>o</sup> .5	621 <sup>o</sup> .0	622 <sup>o</sup> .5	620 <sup>o</sup> .0		
22	0	613 <sup>o</sup> .8	607 <sup>o</sup> .7	608 <sup>o</sup> .0	609 <sup>o</sup> .0	615 <sup>o</sup> .8	628 <sup>o</sup> .2	620 <sup>o</sup> .5	623 <sup>o</sup> .0	621 <sup>o</sup> .0	622 <sup>o</sup> .0	619 <sup>o</sup> .0		
27	0	612 <sup>o</sup> .2	610 <sup>o</sup> .0	615 <sup>o</sup> .0	611 <sup>o</sup> .2	615 <sup>o</sup> .0	622 <sup>o</sup> .0	620 <sup>o</sup> .0	624 <sup>o</sup> .5	620 <sup>o</sup> .6	622 <sup>o</sup> .0	619 <sup>o</sup> .0		
32	0	612 <sup>o</sup> .0	605 <sup>o</sup> .0	613 <sup>o</sup> .0	612 <sup>o</sup> .4	615 <sup>o</sup> .4	626 <sup>o</sup> .2	622 <sup>o</sup> .0	622 <sup>o</sup> .5	620 <sup>o</sup> .8	622 <sup>o</sup> .2	616 <sup>o</sup> .5		
37	0	612 <sup>o</sup> .9	619 <sup>o</sup> .8	619 <sup>o</sup> .0	614 <sup>o</sup> .8	622 <sup>o</sup> .5	630 <sup>o</sup> .0	622 <sup>o</sup> .0	619 <sup>o</sup> .0	621 <sup>o</sup> .0	621 <sup>o</sup> .5	617 <sup>o</sup> .0		
42	0	612 <sup>o</sup> .2	621 <sup>o</sup> .2	612 <sup>o</sup> .1	614 <sup>o</sup> .0	625 <sup>o</sup> .0	627 <sup>o</sup> .2	622 <sup>o</sup> .0	618 <sup>o</sup> .0	621 <sup>o</sup> .0	621 <sup>o</sup> .2	618 <sup>o</sup> .5		
47	0	610 <sup>o</sup> .0	611 <sup>o</sup> .0	604 <sup>o</sup> .1	614 <sup>o</sup> .2	625 <sup>o</sup> .0	628 <sup>o</sup> .0	622 <sup>o</sup> .0	618 <sup>o</sup> .2	621 <sup>o</sup> .2	620 <sup>o</sup> .0	618 <sup>o</sup> .0		
52	0	610 <sup>o</sup> .3	617 <sup>o</sup> .0	604 <sup>o</sup> .0	615 <sup>o</sup> .0	635 <sup>o</sup> .5	626 <sup>o</sup> .5	622 <sup>o</sup> .2	619 <sup>o</sup> .0	621 <sup>o</sup> .2	620 <sup>o</sup> .2	620 <sup>o</sup> .0		
57	0	610 <sup>o</sup> .0	623 <sup>o</sup> .6	603 <sup>o</sup> .3	615 <sup>o</sup> .0	637 <sup>o</sup> .0	627 <sup>o</sup> .0	623 <sup>o</sup> .0	619 <sup>o</sup> .0	621 <sup>o</sup> .4	621 <sup>o</sup> .5	619 <sup>o</sup> .0		

Thermometer	46 <sup>o</sup> .9	46 <sup>o</sup> .9	47 <sup>o</sup> .0	46 <sup>o</sup> .6	46 <sup>o</sup> .8	46 <sup>o</sup> .8	46 <sup>o</sup> .7	46 <sup>o</sup> .5	46 <sup>o</sup> .2	46 <sup>o</sup> .0	45 <sup>o</sup> .0
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M. S.		One Scale Division = 0 <sup>o</sup> .00063 parts of the V. F.											VERTICAL FORCE.	
3	0	193 <sup>o</sup> .4	152 <sup>o</sup> .7	187 <sup>o</sup> .2	196 <sup>o</sup> .8	197 <sup>o</sup> .6	184 <sup>o</sup> .3	186 <sup>o</sup> .7	188 <sup>o</sup> .1	188 <sup>o</sup> .8	188 <sup>o</sup> .6	185 <sup>o</sup> .8		
8	0	191 <sup>o</sup> .4	192 <sup>o</sup> .5	189 <sup>o</sup> .0	197 <sup>o</sup> .6	197 <sup>o</sup> .6	184 <sup>o</sup> .3	186 <sup>o</sup> .7	188 <sup>o</sup> .5	188 <sup>o</sup> .8	188 <sup>o</sup> .5	185 <sup>o</sup> .8		
13	0	193 <sup>o</sup> .8	192 <sup>o</sup> .7	193 <sup>o</sup> .1	197 <sup>o</sup> .9	197 <sup>o</sup> .6	184 <sup>o</sup> .3	187 <sup>o</sup> .3	189 <sup>o</sup> .0	188 <sup>o</sup> .7	188 <sup>o</sup> .5	185 <sup>o</sup> .8		
18	0	192 <sup>o</sup> .5	192 <sup>o</sup> .5	194 <sup>o</sup> .8	197 <sup>o</sup> .9	197 <sup>o</sup> .6	184 <sup>o</sup> .5	187 <sup>o</sup> .9	189 <sup>o</sup> .0	188 <sup>o</sup> .7	188 <sup>o</sup> .3	184 <sup>o</sup> .6		
23	0	192 <sup>o</sup> .3	192 <sup>o</sup> .7	194 <sup>o</sup> .8	197 <sup>o</sup> .7	196 <sup>o</sup> .8	184 <sup>o</sup> .5	188 <sup>o</sup> .3	189 <sup>o</sup> .0	188 <sup>o</sup> .7	188 <sup>o</sup> .3	184 <sup>o</sup> .6		
28	0	193 <sup>o</sup> .2	192 <sup>o</sup> .7	197 <sup>o</sup> .2	197 <sup>o</sup> .7	195 <sup>o</sup> .9	185 <sup>o</sup> .7	188 <sup>o</sup> .3	189 <sup>o</sup> .0	188 <sup>o</sup> .7	188 <sup>o</sup> .3	184 <sup>o</sup> .6		
33	0	193 <sup>o</sup> .2	193 <sup>o</sup> .1	197 <sup>o</sup> .8	197 <sup>o</sup> .7	195 <sup>o</sup> .9	186 <sup>o</sup> .1	188 <sup>o</sup> .6	189 <sup>o</sup> .0	188 <sup>o</sup> .6	188 <sup>o</sup> .5	184 <sup>o</sup> .6		
38	0	193 <sup>o</sup> .2	191 <sup>o</sup> .9	193 <sup>o</sup> .3	197 <sup>o</sup> .5	195 <sup>o</sup> .9	187 <sup>o</sup> .2	188 <sup>o</sup> .7	188 <sup>o</sup> .8	188 <sup>o</sup> .6	188 <sup>o</sup> .3	185 <sup>o</sup> .0		
43	0	193 <sup>o</sup> .5	190 <sup>o</sup> .7	191 <sup>o</sup> .7	197 <sup>o</sup> .5	192 <sup>o</sup> .6	187 <sup>o</sup> .2	188 <sup>o</sup> .7	188 <sup>o</sup> .8	188 <sup>o</sup> .6	188 <sup>o</sup> .0	185 <sup>o</sup> .0		
48	0	193 <sup>o</sup> .5	192 <sup>o</sup> .6	192 <sup>o</sup> .5	197 <sup>o</sup> .5	192 <sup>o</sup> .8	187 <sup>o</sup> .2	188 <sup>o</sup> .6	188 <sup>o</sup> .8	188 <sup>o</sup> .6	187 <sup>o</sup> .1	185 <sup>o</sup> .0		
53	0	194 <sup>o</sup> .0	191 <sup>o</sup> .4	193 <sup>o</sup> .9	197 <sup>o</sup> .5	185 <sup>o</sup> .7	187 <sup>o</sup> .2	188 <sup>o</sup> .6	188 <sup>o</sup> .8	188 <sup>o</sup> .6	186 <sup>o</sup> .7	185 <sup>o</sup> .0		
58	0	193 <sup>o</sup> .1	187 <sup>o</sup> .2	195 <sup>o</sup> .5	197 <sup>o</sup> .5	185 <sup>o</sup> .7	187 <sup>o</sup> .2	188 <sup>o</sup> .7	188 <sup>o</sup> .8	188 <sup>o</sup> .6	186 <sup>o</sup> .5	185 <sup>o</sup> .8		

Thermometer	47 <sup>o</sup> .4	47 <sup>o</sup> .8	48 <sup>o</sup> .4	47 <sup>o</sup> .8	47 <sup>o</sup> .9	47 <sup>o</sup> .4	47 <sup>o</sup> .8	48 <sup>o</sup> .2	47 <sup>o</sup> .7	47 <sup>o</sup> .4	46 <sup>o</sup> .7
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS

Mean Göttingen Time.	Barometer at 32 <sup>o</sup> .	Thermometers.		Wind.		Weather.	
		Dry.	Wet.	Direction.	Force.		
D. H. M.	In.	°	°				
26	10	0	29 <sup>o</sup> .817	25 <sup>o</sup> .9	23 <sup>o</sup> .8	N.W. by W. Light.	Cloudy; cir.-cum. and cir.-strat.
	11	0	29 <sup>o</sup> .823	24 <sup>o</sup> .4	22 <sup>o</sup> .6	N.W. Very light.	Fine; cir.-cum. and cir.-strat.
	12	0	29 <sup>o</sup> .837	23 <sup>o</sup> .7	22 <sup>o</sup> .3	N.N.W. Very light.	Fine; cir.-cum. and cir.-strat.
	13	0	29 <sup>o</sup> .844	22 <sup>o</sup> .6	21 <sup>o</sup> .7	—	Fine; cir.-cum. and cir.-strat.
	14	0	29 <sup>o</sup> .845	22 <sup>o</sup> .5	21 <sup>o</sup> .9	—	Fine; cir.-cum. and cir.-strat.; aurora.
	15	0	29 <sup>o</sup> .845	21 <sup>o</sup> .7	20 <sup>o</sup> .9	—	Fine; cir.-cum. and cir.-strat.
	16	0	29 <sup>o</sup> .847	21 <sup>o</sup> .3	20 <sup>o</sup> .7	—	Fine; cir.-cum. and cir.-strat.
	17	0	29 <sup>o</sup> .835	20 <sup>o</sup> .4	20 <sup>o</sup> .0	—	Fine; cir.-cum. and cir.-strat.
	18	0	29 <sup>o</sup> .816	19 <sup>o</sup> .6	19 <sup>o</sup> .3	—	Light clouds; cir.-cum. and cir.-strat.
	19	0	29 <sup>o</sup> .808	20 <sup>o</sup> .5	20 <sup>o</sup> .0	—	Clouds; cir.-cum. and cir.-strat.
	20	0	29 <sup>o</sup> .788	21 <sup>o</sup> .5	20 <sup>o</sup> .9	W. by S. Very light.	Cloudy; cir.-cum. and cir.-strat.
	21	0	29 <sup>o</sup> .774	22 <sup>o</sup> .1	21 <sup>o</sup> .2	W. by S. Very light.	Cloudy; cir.-cum. and cir.-strat.

\* At 27<sup>o</sup> 10<sup>h</sup>, Thermometer of H. F., 47<sup>o</sup> 10; of V. F., 47<sup>o</sup> 12.

ION.

19°.	20°.
Sc. Div.	Sc. Div.
110°4	109°2
110°2	109°8
110°2	109°8
109°6	109°0
109°4	108°5
108°9	108°4
109°2	106°6
108°9	105°6
109°3	105°6
109°5	104°8
109°6	104°3
108°8	104°4

MAGNETICAL OBSERVATIONS. November 26th and 27th.

DECLINATION. Angular Value of one Scale Division = 0' 721.

DECLINATION.				Angular Value of one Scale Division = 0' 721.									
21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
101°3	101°4	111°1	113°2	113°4	111°8	108°5	113°0	113°1	109°6	105°2	107°4	107°4	
101°4	103°8	111°0	112°6	113°8	112°7	109°7	114°4	112°4	108°6	105°0	105°8	107°2	
103°9	103°6	111°0	112°4	111°0	111°4	109°7	115°9	111°6	109°3	105°2	106°8	106°4	
101°0	101°2	110°4	112°2	113°0	111°3	109°4	116°4	112°5	108°9	103°6	107°6	106°6	
101°3	105°4	109°4	111°2	113°5	111°4	109°4	116°4	111°3	107°8	101°6	108°4	106°2	
105°4	106°8	108°2	111°0	114°3	112°1	109°6	116°4	110°6	106°6	105°4	110°4	105°8	
106°2	108°6	108°6	113°1	114°5	111°4	111°5	116°4	111°4	106°6	105°3	110°2	106°4	
107°3	108°6	109°4	112°4	114°2	110°4	111°0	115°4	109°2	106°2	101°7	111°0	106°5	
108°2	110°2	110°4	112°8	114°3	109°8	111°4	114°4	110°4	104°4	104°1	110°4	105°4	
108°5	111°1	110°4	113°5	115°1	110°2	109°5	114°5	108°6	105°4	101°4	110°2	105°0	
108°4	111°8	112°5	113°8	114°6	109°6	109°8	114°3	109°4	105°4	105°4	108°4	105°8	
106°4	111°4	113°4	114°0	115°2	109°4	110°9	112°6	108°8	105°4	105°4	106°8	106°2	

AL FORCE.

621°5	621°5
621°5	624°0
621°5	621°5
622°5	620°0
622°0	619°0
622°0	619°0
622°2	616°5
621°5	617°0
621°2	618°8
620°0	618°0
620°2	620°0
621°5	619°0

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

619°9	621°0	627°5	631°1	630°2	627°0	615°8	615°0	619°0	615°3	615°0	624°0	628°8
619°8	621°0	629°8	630°0	629°8	621°3	616°0	615°5	619°0	617°0	616°0	622°5	627°6
619°0	619°0	631°4	630°2	629°8	621°9	618°0	618°5	619°2	618°8	617°0	620°0	628°0
616°9	620°2	633°5	630°8	628°8	619°1	619°1	623°0	618°5	620°0	618°0	619°8	625°2
617°0	622°5	631°0	629°8	628°0	618°1	621°0	619°0	618°5	619°5	623°0	621°2	625°1
616°0	619°8	634°3	629°2	628°2	617°9	621°0	619°0	617°8	622°0	623°5	622°2	628°6
618°0	620°0	631°0	631°1	628°7	626°2	619°1	618°5	621°5	621°5	623°0	621°8	627°8
619°0	622°2	632°5	630°0	628°1	615°8	619°4	620°1	617°0	625°0	621°0	622°2	626°2
623°0	622°2	631°0	629°0	628°0	614°0	620°0	618°0	616°5	619°5	622°0	627°0	628°0
625°0	622°0	633°5	629°2	628°0	615°0	619°2	616°0	618°5	624°0	625°0	626°2	630°0
627°0	626°2	632°4	631°0	628°2	616°0	617°0	617°0	613°0	619°8	620°1	628°8	628°8
626°0	629°8	631°5	632°5	627°1	616°0	615°8	616°0	616°0	614°2	617°0	630°2	629°5

VERTICAL FORCE.

46°0	45°0
46°0	45°0

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

185°4	185°3	185°8	186°5	187°1	188°0	187°7	190°1	193°0	191°3	190°7	193°9	193°8
185°4	185°3	185°8	186°5	187°1	188°0	187°7	190°1	193°0	191°3	190°7	193°9	193°8
184°1	185°3	185°6	186°4	187°9	188°0	187°7	191°2	193°0	191°1	191°5	193°7	193°1
184°1	185°4	185°4	185°8	187°9	187°7	187°7	191°2	193°0	191°5	191°5	193°7	193°1
184°1	185°4	185°6	185°8	187°9	187°7	187°7	191°2	192°5	191°5	191°5	193°7	193°2
184°1	185°1	185°6	185°2	188°0	187°7	187°8	192°2	192°5	192°5	191°5	193°7	193°2
184°1	186°2	185°6	185°2	188°0	187°7	187°8	192°2	192°4	192°5	191°5	191°3	192°8
185°1	186°2	187°3	187°1	188°0	187°7	189°8	192°2	192°5	192°5	192°1	193°8	192°8
185°9	186°2	187°1	186°8	188°0	187°7	189°8	193°0	191°3	192°1	192°1	193°8	192°6
185°9	185°3	187°1	186°8	188°0	187°7	189°8	193°1	192°0	190°7	193°1	193°6	193°6
186°4	186°1	186°9	186°6	188°0	187°7	190°4	192°9	191°6	190°7	193°1	193°6	192°4
186°4	186°1	186°5	187°6	188°0	187°7	190°4	192°9	191°5	190°7	192°8	194°0	192°6

and increasing Horizontal and Vertical Force.

Mean Göttingen Time.

D.	H.	M.
26	22	0
	23	0
27	0	0
	1	0
	2	0
	3	0
	4	0
	5	0
	6	0
	7	0
	8	0
	9	0

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
	In.	°	°			
	29° 758	22° 5	21° 2	W.S.W.	Light.	Cloudy; cir.-cum. and cir.-strat.
	29° 724	25° 0	23° 2	W.S.W.	Light.	Cloudy; cir.-cum. and cir.-strat.
	29° 677	24° 6	22° 9	W. by S.	Light.	Cloudy; cir.-strat., cir.-cum., and haze.
	29° 660	25° 4	23° 6	S.W. by S.	Very light.	Cloudy; cir.-strat., cir.-cum., and haze; snow.
	29° 615	26° 5	24° 5	S.W.	Very light.	Cloudy; cir.-strat., cir.-cum., and haze; snow.
	29° 621	27° 5	25° 4	S.W. by W.	Very light.	Cloudy; cir.-strat., cir.-cum., and haze.
	29° 622	26° 7	25° 5	W.S.W.	Moderate.	Cloudy; cir.-strat., cir.-cum., and haze.
	29° 594	27° 8	25° 9	S.W. by W.	Light.	Cloudy; cir.-strat., cir.-cum., and haze.
	29° 556	27° 8	25° 9	W.S.W.	Light.	Cloudy; cir.-strat., cir.-cum., and haze.
	29° 544	30° 8	28° 2	W.S.W.	Moderate.	Cloudy; cir.-strat., cir.-cum., and haze; snow.
	29° 533	31° 6	29° 3	W. by S.	Moderate, with gusts.	Cloudy; cir.-strat., cir.-cum., and haze; snow.
	29° 539	31° 2	29° 3	W.S.W.	Moderate.	Cloudy; cir.-strat., cir.-cum., and haze; snow.

December 22nd and 23rd. MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.	Angular Value of one Scale Division = 0° 721.										DECLINATION.
	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	106°9	106°6	134°2	107°6	110°5	113°5	114°0	114°4	121°6	105°6	116°4
5 0	108°3	106°6	132°4	101°5	111°1	113°4	113°6	116°8	121°6	107°2	116°9
10 0	107°5	107°4	138°4	106°4	112°3	113°4	113°2	117°6	117°8	109°0	116°5
15 0	106°9	108°5	142°0	107°1	111°4	113°4	112°4	117°0	116°2	110°6	114°8
20 0	105°5	108°4	132°6	107°3	112°3	113°6	112°4	117°4	108°4	110°7	115°3
25 0	104°2	109°4	123°6	106°8	112°8	113°6	112°8	120°2	107°0	112°1	110°9
30 0	104°4	109°6	123°4	108°6	112°4	113°6	113°4	121°4	104°4	111°2	111°3
35 0	101°8	112°3	119°4	110°7	112°5	113°6	113°4	120°6	105°0	113°0	111°5
40 0	105°5	119°9	114°0	110°4	112°6	113°4	113°6	120°0	105°8	112°4	110°9
45 0	106°6	120°9	109°4	110°9	112°9	113°2	112°8	121°4	105°2	112°3	112°6
50 0	106°9	121°9	107°4	110°6	113°5	113°2	112°6	121°6	105°2	114°6	113°6
55 0	107°6	125°4	108°9	110°9	113°4	113°4	112°4	120°4	105°4	116°3	112°4
One Scale Division = 0°00087 parts of the H. F.											
M. S.	HORIZONTAL FORCE.										
2 0	635°8	611°0	655°0	642°0	638°0	610°0	636°5	624°2	624°4	633°2	636°1
7 0	640°0	612°5	651°0	636°0	638°5	639°0	636°0	623°4	622°2	633°6	637°5
12 0	640°2	611°0	640°0	636°5	636°5	638°0	636°0	624°8	618°8	634°0	637°0
17 0	643°2	611°0	647°0	635°9	641°0	639°0	636°2	626°5	619°2	636°0	639°4
22 0	647°8	611°2	647°0	636°9	611°0	639°0	635°4	625°5	617°0	636°2	640°2
27 0	646°0	613°1	649°0	636°0	639°5	639°0	635°0	621°8	619°2	637°8	640°0
32 0	637°5	643°8	654°0	635°0	639°0	638°5	631°8	624°0	622°8	636°0	638°3
37 0	636°2	637°5	651°5	636°0	637°5	638°5	634°0	623°2	621°8	640°1	640°2
42 0	639°5	638°5	649°0	638°5	638°0	638°5	633°2	630°0	626°8	639°2	635°8
47 0	637°0	634°5	643°0	641°0	637°3	637°2	632°0	620°8	623°8	635°5	636°7
52 0	640°1	642°0	638°8	649°2	638°0	637°5	631°8	621°5	630°8	635°5	634°0
57 0	641°0	645°0	638°2	639°2	639°0	636°8	631°2	622°2	633°8	635°3	638°2
Thermometer	42°5	43°0	43°0	42°5	41°5	41°1	41°4	41°8	41°2	41°5	41°5
One Scale Division = 0°00063 parts of the V. F.											
M. S.	VERTICAL FORCE.										
3 0	201°7	198°5	199°4	199°0	198°8	198°5	199°4	198°4	198°0	195°6	192°3
8 0	201°0	198°6	198°4	199°1	198°8	198°5	199°4	198°4	198°0	195°2	193°1
13 0	200°8	198°7	198°2	199°1	198°8	198°5	199°4	199°5	198°0	195°2	193°4
18 0	201°1	198°7	197°3	199°1	198°8	199°1	199°4	199°5	197°9	195°2	194°3
23 0	202°2	198°8	196°5	199°1	198°8	198°9	199°4	199°5	197°4	194°9	194°3
28 0	201°6	199°4	197°0	199°1	198°5	198°9	198°5	198°6	196°4	194°9	193°8
33 0	200°5	199°4	197°4	199°1	198°5	198°9	198°5	198°1	196°3	194°9	193°8
38 0	199°0	198°3	197°2	199°1	198°5	198°9	198°5	198°3	197°1	195°9	193°8
43 0	199°0	199°0	197°2	199°1	198°5	198°9	198°5	198°0	197°9	195°7	193°8
48 0	198°8	198°7	197°6	199°1	198°5	199°4	198°6	197°3	197°8	193°7	193°8
53 0	198°6	199°3	197°8	199°1	198°5	199°4	198°1	198°0	197°8	192°8	193°8
58 0	198°6	200°4	198°5	199°1	198°5	199°4	199°4	198°0	196°4	192°8	194°4
Thermometer	41°6	42°7	43°4	43°3	42°4	42°2	42°2	42°2	42°2	42°2	42°5

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.	Weather.						
		Dry.	Wet.								
D. H. M.	In.	°	°	Direction.	Force.						
22 10 0	29°224	25°0	22°9	N.W.	Very light.						
11 0	29°255	24°4	21°6	N.W.	Moderate, with gusts.						
12 0	29°291	21°3	19°5	N.W.	Moderate, with gusts.						
13 0	29°317	19°6	17°5	N.W.	Moderate, with gusts.						
14 0	29°345	19°6	16°8	N.W.	Moderate.						
15 0	29°349	18°4	16°4	W.	Light.						
16 0	29°356	18°6	17°0	W.	Light.						
17 0	29°382	19°0	17°5	W. by N.	Very light.						
18 0	29°358	17°7	16°1	W. by N.	Light.						
19 0	29°358	17°3	15°8	W.S.W.	Very light.						
20 0	29°357	17°3	16°0	W.S.W.	Very light.						
21 0	29°349	17°2	16°0	W.S.W.	Very light.						

\* At 23° 10', Thermometer of H. F., 40° 5'; of V. F., 40° 3.



DECLINATION.

19h.	20h.
105°6	106°4
107°2	106°9
109°0	106°5
110°6	104°8
110°7	104°3
112°1	101°9
111°2	111°3
113°0	111°5
112°4	110°9
112°3	112°6
114°6	113°6
116°3	112°4

MAGNETICAL OBSERVATIONS. December 22nd and 23rd.

DECLINATION. Angular Value of one Scale Division = 0'721.

21h.	22h.	23h.	0h.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
111°0	115°4	110°4	110°9	111°0	111°0	115°6	111°5	111°6	109°4	107°5	107°2	101°6
111°4	115°0	110°4	109°4	112°4	109°6	113°6	112°7	112°0	109°2	106°9	105°9	103°4
111°1	114°3	110°2	109°4	113°4	112°6	113°2	111°2	111°4	108°4	108°2	101°9	101°4
111°6	113°6	108°1	108°2	112°6	112°1	114°2	113°5	111°8	108°2	108°4	106°3	103°0
113°4	111°5	109°4	108°0	112°9	113°4	113°8	113°2	110°4	107°4	107°2	106°4	100°8
111°2	112°0	112°4	109°5	112°0	111°4	116°6	111°4	110°2	106°6	106°4	109°4	102°2
112°4	111°9	112°8	109°8	111°4	115°4	116°6	112°7	108°8	106°6	106°5	109°4	103°4
113°4	113°3	113°0	109°0	111°6	111°0	116°2	113°5	110°0	107°4	106°5	107°4	105°9
113°7	114°0	113°0	110°0	111°6	115°0	115°0	112°8	111°2	106°4	106°0	105°2	109°0
112°7	114°4	113°2	109°7	112°8	115°4	112°8	112°2	109°0	106°9	105°8	105°4	110°0
113°1	113°4	115°4	110°0	113°4	112°4	113°0	112°0	110°2	107°3	107°0	105°4	112°0
113°8	112°6	111°7	108°8	112°1	115°1	113°1	111°8	111°9	103°5	108°6	106°0	110°6

HORIZONTAL FORCE.

633°2	636°1
633°6	637°5
634°0	637°0
636°0	639°4
636°2	640°2
637°8	640°0
636°0	638°3
640°1	640°2
639°2	635°8
635°5	636°7
635°5	634°0
635°3	638°2
41°5	41°5

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

636°0	642°0	639°0	643°5	640°0	640°0	637°5	639°0	638°0	631°3	623°8	626°0	637°3	637°0
637°0	641°3	638°2	643°0	641°0	637°5	639°0	628°0	631°2	621°6	629°6	634°0	631°4	631°4
638°0	642°0	638°0	643°0	638°5	635°5	636°0	626°0	631°2	621°2	627°8	638°6	633°0	633°0
637°4	642°0	634°2	640°0	643°0	638°5	635°5	626°0	632°8	621°0	627°8	638°0	632°0	632°0
638°9	641°0	630°0	639°8	645°0	640°0	630°0	628°0	633°0	621°5	633°0	639°0	631°8	631°8
639°0	640°8	632°0	638°0	637°5	637°0	637°5	626°0	628°2	623°2	631°0	638°2	632°0	632°0
642°2	638°2	632°1	638°8	634°5	639°0	637°0	626°5	625°2	618°8	630°2	636°0	633°0	633°0
638°0	637°8	633°0	640°0	642°0	637°0	626°0	627°0	622°5	623°0	639°0	637°0	630°0	630°0
640°0	637°0	633°0	641°8	639°0	635°0	641°0	628°8	633°0	620°6	633°7	640°5	629°8	629°8
641°3	635°0	633°2	637°0	639°0	639°0	639°0	628°5	630°8	621°0	637°0	640°0	636°0	636°0
641°0	637°8	640°0	641°0	641°0	637°5	630°0	629°2	629°6	628°9	629°8	630°0	611°0	611°0
641°0	641°0	640°0	640°2	640°0	634°5	630°0	630°2	622°4	624°7	633°0	640°0	643°0	643°0
41°5	42°0	41°8	41°6	41°4	40°5	40°0	39°6	39°9	39°5	39°0	39°4	39°8	39°8

VERTICAL FORCE.

195°6	192°3
195°2	193°1
195°2	193°4
195°2	194°3
194°9	194°3
194°9	193°8
194°9	193°8
195°9	193°8
195°7	193°8
193°7	193°8
192°8	193°8
192°8	194°4
42°2	42°5

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

194°4	192°1	192°9	192°9	193°3	191°1	191°9	198°6	198°3	198°4	197°5	200°5	202°8	203°4
193°6	192°3	192°9	191°1	193°7	194°9	198°6	198°3	198°7	198°1	200°5	202°8	203°4	203°4
193°4	192°1	192°9	191°2	195°3	194°8	199°3	197°9	198°4	198°4	200°5	202°8	203°4	203°4
193°4	192°3	192°9	191°2	195°1	195°8	198°2	197°9	198°4	199°3	200°5	202°1	203°4	203°4
193°4	192°4	192°9	191°2	194°0	195°5	199°3	198°6	197°8	199°9	202°2	202°1	203°4	203°4
194°1	192°4	192°9	191°2	195°7	196°9	199°3	198°6	197°8	199°4	202°2	202°1	203°4	203°4
192°3	192°4	192°7	191°2	195°7	196°9	198°0	198°6	197°2	199°4	200°7	202°1	205°1	205°1
192°3	192°5	192°9	191°5	195°7	194°9	198°5	198°6	199°1	197°4	202°9	202°1	205°1	205°1
193°0	192°5	192°9	193°5	195°7	197°9	198°1	198°1	199°0	199°5	202°7	202°1	205°1	205°1
193°0	192°5	192°9	193°8	195°7	197°9	198°1	198°1	197°9	201°1	201°1	202°1	205°1	205°1
193°0	192°5	192°9	194°8	195°5	197°1	198°1	198°1	197°5	200°7	201°9	203°4	203°9	203°9
42°4	42°7	42°2	42°4	42°6	41°7	40°9	40°4	40°4	40°6	40°0	39°7	40°3	40°3

and increasing Westerly Declination.

and increasing Horizontal and Vertical Force.

Weather.

Mean Go-tingen Time.	Barometer at 32°.	Thermom'trs. Dry.	Wet.	Wind. Direction.	Force.	Weather.
D. H. M.	In.	°	°			
22 22 0	29°336	17°5	16°3	W.S.W.	Very light.	Cloudy; cir.-cum. and haze.
23 0 0	29°328	17°5	16°3	W.S.W.	Very light.	Cloudy; cir.-cum. and haze.
23 0 0	29°324	17°7	16°8	S.W. by S.	Very light.	Cloudy; cir.-cum. cir.-strat. and haze.
1 0 0	29°322	17°7	16°9	S.W.	Light.	Cloudy; cir.-cum. cir.-strat. and haze.
2 0 0	29°272	19°9	18°7	S.W.	Light.	Cloudy; cir.-cum. cir.-strat. and haze.
3 0 0	29°246	19°4	18°5	S.W.	Very light.	Cloudy; cir.-cum. cir.-strat. and haze.
4 0 0	29°201	20°2	18°7	S.W.	Moderate.	Cloudy; cir.-cum. cir.-strat. and haze.
5 0 0	29°153	21°9	20°9	S.W.	Light.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
6 0 0	29°074	23°6	22°2	S.W. by S.	Fresh, with squalls.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
7 0 0	29°057	24°0	22°6	S.W.	Brisk.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
8 0 0	29°025	24°0	23°1	S.W.	Brisk.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
9 0 0	29°014	24°4	23°3	S.W. by W.	Moderate.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.

METEOROLOGICAL OBSERVATIONS.

Mean Go-tingen Time.	Barometer at 32°.	Thermom'trs. Dry.	Wet.	Wind. Direction.	Force.	Weather.
D. H. M.	In.	°	°			
22 22 0	29°336	17°5	16°3	W.S.W.	Very light.	Cloudy; cir.-cum. and haze.
23 0 0	29°328	17°5	16°3	W.S.W.	Very light.	Cloudy; cir.-cum. and haze.
23 0 0	29°324	17°7	16°8	S.W. by S.	Very light.	Cloudy; cir.-cum. cir.-strat. and haze.
1 0 0	29°322	17°7	16°9	S.W.	Light.	Cloudy; cir.-cum. cir.-strat. and haze.
2 0 0	29°272	19°9	18°7	S.W.	Light.	Cloudy; cir.-cum. cir.-strat. and haze.
3 0 0	29°246	19°4	18°5	S.W.	Very light.	Cloudy; cir.-cum. cir.-strat. and haze.
4 0 0	29°201	20°2	18°7	S.W.	Moderate.	Cloudy; cir.-cum. cir.-strat. and haze.
5 0 0	29°153	21°9	20°9	S.W.	Light.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
6 0 0	29°074	23°6	22°2	S.W. by S.	Fresh, with squalls.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
7 0 0	29°057	24°0	22°6	S.W.	Brisk.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
8 0 0	29°025	24°0	23°1	S.W.	Brisk.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.
9 0 0	29°014	24°4	23°3	S.W. by W.	Moderate.	Cloudy; cir.-cum. cir.-strat. and haze; slight snow.

January 19th and 20th.			MAGNETICAL OBSERVATIONS.													
Mean Göttingen Time.			Angular Value of one Scale Division = 0°721.						DECLINATION.							
			10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.			
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		106°8	107°5	107°6	109°7	111°0	116°1	113°3	113°4	111°3	112°6	104°4			
5	0		107°4	107°6	107°1	110°0	117°6	115°3	113°0	113°2	111°4	112°3	102°0			
10	0		107°1	107°8	107°5	110°1	119°0	114°4	112°4	113°4	111°7	109°6	102°2			
15	0		106°7	107°4	107°6	111°3	118°4	113°5	112°0	112°6	112°5	110°4	101°4			
20	0		106°0	107°0	109°0	111°8	119°0	113°0	112°4	112°4	112°7	111°4	102°2			
25	0		105°4	107°8	108°6	113°4	118°0	112°6	112°3	112°3	113°2	110°4	09°4			
30	0		104°4	108°0	108°5	115°4	117°1	112°2	112°3	111°7	113°0	110°4	103°2			
35	0		104°4	108°4	109°2	115°4	116°9	112°4	112°5	111°4	111°6	110°2	105°8			
40	0		105°7	108°9	109°4	114°0	117°4	112°3	112°4	111°3	112°4	110°2	106°6			
45	0		107°0	106°0	109°6	113°3	117°4	112°9	112°5	111°2	112°3	111°4	105°4			
50	0		107°8	109°8	109°5	112°3	118°0	113°4	112°9	111°7	112°6	113°2	107°2			
55	0		107°5	109°0	110°0	112°3	117°4	113°4	112°4	111°5	113°2	107°4	107°4			
			One Scale Division = 0°00087 parts of the H. F.						HORIZONTAL FORCE.							
M.	S.															
2	0		645°0	648°0	649°0	649°0	645°0	649°2	647°5	650°2	648°0	643°0	629°8			
7	0		648°0	646°5	649°2	648°0	646°0	648°5	647°5	649°0	646°0	643°5	640°0			
12	0		645°8	646°8	646°0	646°0	646°0	647°0	647°0	648°5	645°0	643°0	635°0			
17	0		650°0	649°0	645°8	645°2	644°6	648°8	647°2	649°5	641°8	641°1	634°2			
22	0		649°2	648°8	648°0	645°3	645°0	648°0	647°5	650°0	643°9	643°2	630°0			
27	0		648°0	649°2	648°0	644°8	645°5	648°5	646°5	649°0	645°0	643°2	631°2			
32	0		646°8	651°0	646°8	646°9	645°0	646°2	647°0	649°8	646°1	645°0	631°0			
37	0		647°8	650°5	647°0	648°8	645°2	646°0	648°5	650°0	645°0	642°0	626°1			
42	0		648°0	648°2	645°8	651°1	645°5	649°2	649°0	650°2	644°0	642°0	628°0			
47	0		650°0	651°0	648°0	650°2	649°0	646°0	649°0	649°5	645°0	641°4	611°6			
52	0		650°0	651°0	648°4	649°9	648°0	646°5	649°0	649°0	643°9	644°2	615°5			
57	0		648°2	651°0	650°0	647°1	649°0	646°0	649°0	649°0	643°0	639°7	645°8			
Thermometer			39°5	39°4	39°2	39°4	38°9	38°5	38°6	39°0	39°5	40°0	41°4			
			One Scale Division = 0°00063 parts of the V. F.						VERTICAL FORCE.							
M.	S.															
3	0		196°2	198°6	194°0	194°2	194°1	195°1	194°0	194°2	192°3	189°1	182°3			
8	0		196°6	198°6	194°1	194°2	194°1	194°7	194°0	194°2	192°3	188°2	181°7			
13	0		196°8	198°6	194°4	194°5	194°8	194°7	194°0	194°2	192°3	186°3	180°3			
18	0		198°7	196°9	194°4	194°5	194°8	194°7	193°9	194°2	192°0	185°2	180°3			
23	0		198°7	196°9	194°4	196°0	194°6	194°0	193°9	194°2	192°0	184°7	179°5			
28	0		198°7	196°9	194°4	196°0	194°6	194°0	193°9	194°2	192°0	183°5	179°3			
33	0		196°9	196°9	194°2	195°3	194°8	193°8	193°9	194°2	192°0	183°5	179°3			
38	0		196°9	196°6	194°2	195°3	194°8	193°8	195°0	194°2	191°9	183°5	181°1			
43	0		198°2	194°3	194°2	194°7	194°8	194°0	195°0	194°2	191°1	183°5	181°3			
48	0		198°2	194°3	194°2	194°1	195°1	194°0	195°0	194°2	191°1	183°3	181°5			
53	0		198°2	194°3	194°5	194°1	195°1	194°0	195°0	194°2	190°1	183°3	181°2			
58	0		198°6	194°3	194°2	194°1	195°1	194°0	194°2	194°2	190°1	182°6	181°2			
Thermometer			39°1	39°1	39°5	40°0	40°1	39°9	40°4	39°6	40°2	40°6	41°4			

Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.
				Dry.	Wet.	Direction.	Force.	
D.	H.	M.	In.	°	°			
19	10	0	30°44	21°9	20°0	S.S.E.	Very light.	Mostly clear.
	11	0	30°06	21°1	20°5	S.E. by S.	Very light.	Cir.-cum. and cum.-strat.
	12	0	30°07	20°6	19°9	S.S.E.	Very light.	Cir.-strat. and cum.-strat.
	13	0	30°050	23°6	21°2	S.	Moderate.	Cir.-cum. and cir.-strat.
	14	0	30°026	23°8	21°9	S.	Moderate.	Cir.-cum. and haze.
	15	0	29°996	24°6	22°9	S. by E.	Moderate.	Clear and unclouded
	16	0	29°952	25°3	23°4	S. by E.	Moderate.	Clear and unclouded
	17	0	29°896	25°0	23°6	S.	Light.	Clear and unclouded.
	18	0	29°862	26°3	24°0	S.S.W.	Light.	Clear.
	19	0	29°858	25°5	23°4	S.S.W.	Light.	Clear.
	20	0	29°868	25°5	23°4	S.S.W.	Very light.	Clear.
	21	0	29°853	27°4	24°5	S.W. by S.	Very light.	Clear.

\* At 204 10<sup>h</sup>, Thermometer of H. F., 48°·4; of V. F., 47°·2.

DIP.	
19°.	20°.
Sc. Div.	Sc. Div.
112°6	104°4
112°3	102°0
109°6	102°2
110°4	101°4
111°4	102°2
110°1	104°1
110°4	103°2
110°2	105°8
110°2	106°6
111°4	105°4
113°2	107°2
107°4	107°4

MAGNETICAL FORCE.	
613°0	629°8
613°5	610°0
613°0	635°0
611°1	634°2
613°2	630°0
613°2	631°2
615°0	631°0
612°0	636°1
612°0	638°0
611°4	611°6
614°2	615°5
639°7	615°8
40°0	41°4

MAGNETICAL FORCE.	
189°1	182°3
188°2	181°7
186°3	180°3
185°2	180°3
184°7	179°5
183°5	179°3
183°5	179°3
181°5	181°1
183°3	181°5
183°3	181°2
182°6	181°2
40°6	41°4

and increasing Westerly Declination.

Weather.	
D.	H. M.
19	22 0
	23 0
20	0 0
	1 0
	2 0
	3 0
	4 0
	5 0
	6 0
	7 0
	8 0
	9 0

MAGNETICAL OBSERVATIONS.												
January 19th and 20th.												
DECLINATION.						Angular Value of one Scale Division = 0°721.						
21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
107°6	117°4	112°2	112°5	112°4	118°2	118°3	117°6	110°6	111°0	107°6	103°8	103°2
108°5	117°5	112°4	113°4	112°6	118°2	119°4	116°0	109°4	110°4	107°8	104°1	103°0
108°8	116°6	111°8	113°6	113°4	118°4	117°6	115°6	111°1	109°5	107°4	104°3	102°7
109°6	115°5	111°9	112°5	113°3	116°8	121°4	111°0	111°4	109°6	107°4	105°2	102°9
111°8	115°4	111°5	112°4	112°8	116°1	121°6	113°4	110°8	110°2	106°4	105°3	103°3
113°8	113°7	111°5	112°8	114°8	116°1	119°4	113°0	112°2	109°4	105°8	105°3	103°4
114°5	113°5	111°2	111°4	116°0	116°0	124°0	113°4	111°5	109°4	105°4	105°3	104°3
115°4	113°6	111°1	111°2	115°5	117°8	122°0	113°3	111°2	109°6	105°4	105°8	104°2
115°8	113°4	111°4	110°6	115°8	119°4	123°4	111°0	111°4	108°6	105°0	105°4	104°4
116°0	113°4	110°7	111°6	115°8	119°2	121°0	112°9	111°9	108°6	104°6	101°0	104°6
116°6	112°5	111°4	110°7	115°4	119°0	120°4	112°5	111°5	107°8	103°8	103°4	101°2
116°8	112°2	113°5	112°5	117°0	117°3	118°6	112°1	111°5	107°4	103°4	103°3	104°6

HORIZONTAL FORCE.												
Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.												
646°8	649°8	646°0	613°3	610°0	646°0	612°0	639°0	627°0	628°5	633°2	638°2	642°0
651°8	650°2	643°5	611°0	615°0	615°8	641°2	638°0	623°0	630°0	635°8	635°0	640°0
650°6	619°8	615°8	641°2	644°0	646°0	639°5	636°5	622°0	628°0	637°4	636°0	639°0
650°2	650°4	648°0	643°1	644°0	617°5	641°7	637°0	619°5	629°0	634°8	634°0	637°6
650°2	649°0	646°9	641°0	643°0	618°0	641°5	635°5	618°5	622°0	636°2	634°1	639°1
650°3	650°0	646°8	643°2	645°0	645°0	645°2	634°0	620°0	631°0	636°8	633°7	634°0
650°2	648°7	645°5	643°2	646°8	645°4	647°0	631°2	621°0	632°8	636°6	632°9	633°9
650°0	650°0	644°2	640°0	646°8	643°0	643°5	629°0	622°0	632°8	637°8	633°0	634°9
650°0	647°3	645°0	643°1	647°0	646°0	642°5	631°0	623°0	633°0	637°0	635°0	634°4
646°8	646°0	646°2	639°8	646°2	646°4	645°5	630°0	623°5	634°2	638°2	640°2	634°0
647°2	647°4	643°2	645°0	645°0	641°0	641°0	627°5	625°0	635°0	639°0	642°0	630°1
647°8	646°0	643°1	645°0	645°0	641°2	639°5	628°0	627°0	636°2	638°0	644°1	628°0
41°6	41°6	42°5	43°0	43°1	42°8	42°7	43°5	44°9	45°1	45°6	46°4	47°5

VERTICAL FORCE.												
Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°61.												
180°8	183°3	185°0	186°9	186°7	185°4	186°3	186°3	185°9	186°6	185°5	184°5	184°2
181°5	184°8	184°0	186°7	185°0	185°4	187°1	186°3	185°9	186°6	185°5	184°3	184°2
181°5	185°0	184°4	186°5	185°0	185°4	187°1	186°3	185°9	186°6	185°5	184°1	183°9
181°2	185°6	185°0	186°5	185°0	185°4	187°6	185°3	185°9	186°6	185°2	183°3	184°0
181°2	185°6	185°0	186°5	185°0	185°5	187°6	186°3	185°9	186°3	185°2	183°3	183°1
181°9	185°6	185°0	186°5	185°0	185°5	187°6	186°3	185°9	186°3	185°2	183°3	182°4
180°9	185°6	185°0	186°5	185°0	185°5	187°6	186°3	186°0	185°9	185°2	182°4	182°4
180°9	185°6	185°0	187°0	185°2	185°5	187°6	186°3	186°0	185°5	185°2	182°4	182°4
180°8	185°6	185°0	187°0	185°2	185°5	187°1	185°9	186°3	185°5	184°8	183°2	182°4
180°8	185°4	185°5	187°0	185°0	185°5	186°3	185°9	186°6	185°5	184°9	184°2	182°2
181°2	185°6	185°6	187°0	185°0	185°6	186°3	185°9	186°6	185°5	184°8	184°2	181°5
181°2	185°4	185°6	186°7	185°4	186°3	186°3	185°9	186°6	185°5	184°7	184°2	181°5
41°5	41°5	42°3	42°9	43°5	43°0	43°1	43°4	44°4	44°7	44°8	45°3	46°5

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.									
Mean Gettingen Time.	Barometer at 42°.	Thermometers.		Wind.		Weather.			
		Dry.	Wet.	Direction.	Force.				
D. H. M.	In.	°	°						
19 22 0	29°825	27°9	24°9	S.W. by S.	Very light.	Cir.-cum. and haze.			
23 0	29°814	29°2	26°1	S.W. by S.	Very light.	Cir.-cum. and cir.-strat.			
20 0 0	29°822	29°7	26°6	S.W. by S.	Very light.	Mostly clear.			
1 0	29°811	30°2	27°1	S.S.W.	Very light.	Clear and unclouded.			
2 0	29°820	30°4	27°3	S. by W.	Very light.	Clear and unclouded.			
3 0	29°825	33°5	29°5	S. by W.	Light.	Cir.-strat. and haze.			
4 0	29°829	36°0	31°9	S. by W.	Light.	Cir.-strat. and cir.-cum.			
5 0	29°811	37°6	32°2	S. by W.	Light.	Clear and unclouded.			
6 0	29°776	38°5	32°9	S. by W.	Light.	Clear and unclouded.			
7 0	29°758	38°8	33°6	S. by W.	Very light.	Clear.			
8 0	29°723	40°6	35°5	S. by W.	Very light.	Clear.			
9 0	29°705	41°9	37°0	S. by W.	Very light.	Clear.			

February 25th and 26th.			MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.			Angular Value of one Scale Division = 0° 721.						DECLINATION.					
			10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0		112° 4	117° 3	121° 0	112° 4	115° 4	120° 8	119° 8	116° 5	115° 6	116° 4	115° 8	
5	0		113° 6	117° 2	125° 6	112° 6	115° 8	127° 4	120° 4	116° 7	115° 4	116° 3	116° 0	
10	0		114° 2	117° 2	137° 6	112° 6	116° 2	129° 5	121° 0	117° 3	115° 3	116° 3	116° 0	
15	0		114° 2	117° 4	137° 7	112° 6	115° 6	133° 4	120° 4	117° 5	115° 4	116° 4	117° 4	
20	0		114° 6	118° 6	139° 2	113° 0	115° 5	132° 4	117° 4	117° 4	116° 3	116° 3	116° 0	
25	0		114° 4	119° 4	134° 5	112° 4	115° 4	127° 2	115° 5	116° 7	117° 1	115° 9	116° 2	
30	0		114° 4	119° 4	127° 0	113° 4	115° 8	119° 8	114° 8	116° 8	117° 3	115° 9	116° 1	
35	0		114° 2	119° 2	121° 0	114° 0	118° 4	118° 2	114° 8	116° 6	116° 7	115° 9	116° 2	
40	0		114° 7	119° 4	118° 6	114° 4	119° 2	119° 2	115° 4	116° 5	117° 5	115° 8	116° 8	
45	0		116° 4	119° 1	117° 1	114° 8	120° 4	120° 4	116° 8	116° 4	118° 9	116° 0	117° 0	
50	0		116° 5	119° 4	115° 6	115° 4	118° 6	121° 2	117° 2	116° 6	117° 3	115° 9	117° 2	
55	0		117° 4	118° 4	112° 8	115° 4	118° 8	119° 4	116° 6	116° 7	116° 7	115° 4	117° 2	
			One Scale Division = 0° 00087 parts of the H. F.						HORIZONTAL FORCE.					
M.	S.		631° 0	631° 0	619° 0	632° 0	636° 2	626° 2	631° 4	634° 2	636° 3	633° 1	635° 0	
2	0		635° 0	631° 0	619° 0	631° 4	637° 8	629° 3	631° 0	635° 0	631° 0	632° 1	635° 0	
7	0		631° 5	630° 0	626° 5	631° 8	637° 5	630° 8	633° 0	636° 0	634° 2	633° 0	634° 0	
12	0		631° 5	629° 0	638° 0	632° 0	638° 0	636° 6	636° 2	635° 6	633° 8	635° 0	636° 0	
17	0		634° 0	629° 5	611° 0	631° 8	634° 2	641° 2	637° 3	635° 0	635° 0	634° 0	635° 8	
22	0		630° 0	630° 0	642° 2	631° 8	633° 8	641° 2	636° 0	634° 3	631° 0	631° 0	636° 0	
27	0		633° 0	628° 0	639° 0	632° 0	628° 8	641° 2	634° 0	634° 0	633° 8	635° 0	636° 4	
32	0		633° 2	628° 0	639° 0	631° 8	626° 2	634° 2	633° 0	634° 0	633° 0	634° 8	636° 5	
37	0		632° 8	629° 0	633° 0	632° 8	626° 0	632° 2	632° 8	633° 9	632° 0	634° 0	637° 0	
42	0		632° 0	626° 0	634° 2	633° 0	628° 2	630° 8	634° 0	634° 0	634° 1	636° 8	637° 2	
47	0		632° 0	625° 0	636° 9	633° 8	628° 8	635° 0	635° 2	635° 9	634° 2	635° 0	637° 2	
52	0		631° 0	623° 0	633° 2	634° 8	628° 0	632° 8	635° 0	636° 8	633° 8	635° 0	637° 0	
57	0													
Thermometer			45° 0	45° 2	45° 0	45° 5	46° 6	46° 6	46° 3	45° 5	45° 7	45° 7	45° 6	
			One Scale Division = 0° 00063 parts of the V. F.						VERTICAL FORCE.					
M.	S.		190° 7	189° 7	189° 1	182° 8	181° 6	180° 6	178° 4	180° 6	182° 1	181° 4	181° 4	
3	0		190° 7	189° 5	189° 8	182° 8	181° 3	180° 6	178° 4	180° 6	181° 4	181° 4	181° 4	
8	0		189° 3	189° 5	189° 2	183° 1	181° 1	180° 3	178° 9	180° 6	181° 4	181° 4	181° 4	
13	0		189° 3	188° 8	187° 3	183° 1	180° 9	180° 3	179° 3	180° 6	181° 4	181° 4	181° 4	
18	0		189° 3	188° 8	185° 3	182° 7	180° 8	179° 9	179° 3	181° 6	181° 4	181° 4	181° 4	
23	0		188° 0	188° 8	183° 8	182° 7	180° 7	179° 7	179° 3	181° 6	181° 4	181° 4	181° 4	
28	0		188° 0	188° 8	184° 4	182° 0	180° 5	179° 7	178° 8	181° 6	181° 4	181° 5	181° 4	
33	0		188° 6	188° 8	183° 7	181° 2	180° 6	179° 7	179° 3	181° 7	181° 4	181° 5	181° 4	
38	0		189° 7	188° 8	183° 7	181° 5	180° 3	177° 8	179° 3	181° 7	181° 4	181° 5	181° 4	
43	0		189° 7	188° 8	185° 0	181° 3	180° 3	177° 8	179° 3	182° 4	181° 4	181° 5	181° 6	
48	0		189° 7	189° 1	184° 0	181° 4	180° 5	179° 1	179° 3	182° 4	181° 4	181° 5	181° 6	
53	0		189° 7	189° 1	184° 2	181° 3	180° 6	178° 4	180° 6	182° 4	181° 4	181° 5	181° 6	
58	0													
Thermometer			43° 8	44° 3	44° 4	46° 4	47° 6	48° 2	48° 0	46° 7	46° 6	46° 6	45° 4	
Increasing Numbers denote decreasing Westerly Declination.														
METEOROLOGICAL OBSERVATIONS.														
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.						
				Dry.	Wet.	Direction.	Force.							
D.	H.	M.	In.	°	°									
25	10	0	30° 051	23° 4	20° 0	S.S.E.	Very light.	Generally clear.						
	11	0	30° 040	21° 5	19° 3	—	—	Clear.						
	12	0	30° 029	19° 2	18° 1	—	—	Clear.						
	13	0	30° 030	19° 1	17° 9	—	—	Clear.						
	14	0	30° 028	17° 6	16° 8	—	—	Clear.						
	15	0	30° 017	16° 0	15° 7	—	—	Clear.						
	16	0	30° 015	15° 5	15° 3	—	—	Clear.						
	17	0	30° 002	16° 0	15° 7	—	—	Clear.						
	18	0	29° 991	18° 1	16° 2	—	—	Clear.						
	19	0	29° 985	15° 1	14° 8	—	—	Clear.						
	20	0	29° 977	14° 5	14° 6	—	—	Clear.						
	21	0	29° 962	14° 3	14° 1	S.E. by S.	Very light.	Clear.						

\* At 26° 10', Thermometer of H.F., 47° 6' of V.F., 47° 4'.

DECLINATION.

	19 <sup>h</sup> .	20 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.
116°4	115°8	
116°3	116°0	
116°3	116°0	
116°4	117°4	
116°3	116°0	
115°9	116°2	
115°9	116°4	
115°9	116°2	
115°8	116°8	
116°0	117°0	
115°9	117°2	
115°4	117°2	

HORIZONTAL FORCE.

	43°7	45°6
633°1	635°0	
632°1	635°0	
633°0	634°0	
635°0	636°0	
634°0	635°8	
634°0	636°0	
634°8	636°5	
635°0	637°0	
636°8	637°2	
635°0	637°2	
635°0	637°0	

VERTICAL FORCE.

	46°6	45°4
181°4	181°4	
181°4	181°4	
181°4	181°4	
181°4	181°4	
181°4	181°4	
181°5	181°4	
181°5	181°4	
181°5	181°4	
181°5	181°6	
181°5	181°6	
181°5	181°6	

MAGNETICAL OBSERVATIONS. February 25th and 26th.

DECLINATION. Angular Value of one Scale Division = 0' 721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
116°8	116°8	117°4	118°5	119°0	122°3	125°4	126°4	126°4	121°8	120°0	115°4	114°6
117°2	117°4	117°4	118°1	119°0	124°2	126°4	126°4	122°4	118°6	115°0	113°4	111°2
117°0	116°6	117°5	118°3	120°3	125°2	126°2	127°4	122°4	118°4	115°4	113°0	111°0
117°0	116°4	117°6	118°2	120°7	125°1	126°2	129°4	122°0	118°9	115°8	113°0	111°0
116°8	117°4	117°4	118°0	120°4	124°4	126°0	129°8	123°6	118°7	114°5	112°3	111°4
116°8	116°6	117°4	118°2	121°4	125°4	127°5	128°6	121°6	117°1	114°4	112°2	111°9
117°4	116°6	117°4	118°1	120°4	124°9	127°6	125°2	123°6	117°2	114°4	112°4	111°9
117°4	116°6	117°0	117°8	121°5	126°2	127°2	123°4	123°4	116°4	115°4	112°4	111°6
118°4	117°0	116°0	118°6	121°6	127°4	127°5	122°6	121°1	116°5	115°0	112°0	111°9
118°0	117°2	115°4	117°0	121°4	126°6	127°4	122°4	121°4	116°4	114°6	111°6	111°4
117°4	116°0	117°6	119°0	122°5	127°9	126°2	122°4	120°3	116°0	114°3	111°4	111°6
117°2	116°4	118°0	120°4	122°5	126°4	126°4	122°5	120°4	115°8	113°9	111°3	112°2

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 631.

636°0	637°5	640°0	645°5	647°0	643°0	639°5	630°0	624°0	611°3	614°0	618°0	623°0
636°0	637°0	640°0	644°0	647°0	645°5	640°4	630°0	620°8	608°0	611°0	618°0	628°0
636°4	638°0	640°0	644°0	644°0	645°0	638°8	626°4	620°8	611°8	611°0	618°0	628°0
637°0	638°0	640°0	644°0	644°0	645°0	638°8	623°0	618°5	610°0	610°0	620°0	626°5
636°9	638°0	642°2	644°5	645°0	645°0	637°8	620°3	617°4	612°2	611°0	620°5	627°0
635°0	638°0	642°0	643°5	644°0	646°0	636°0	617°8	615°8	612°0	613°8	622°0	626°5
634°8	638°0	642°0	644°0	642°8	644°3	635°5	619°5	615°0	612°0	614°0	620°0	626°5
636°0	639°0	642°5	642°5	644°0	644°0	635°5	617°8	616°2	612°0	613°0	620°0	626°5
635°8	639°0	643°0	641°5	645°0	643°5	634°4	619°6	616°2	610°0	614°5	620°5	630°0
639°0	642°0	644°0	640°0	644°0	644°0	635°2	620°2	613°7	607°0	618°0	622°0	629°0
639°2	640°0	642°5	641°0	644°0	641°0	634°0	621°6	614°1	611°0	616°5	623°0	626°0
639°0	641°0	642°5	642°5	646°0	640°0	631°2	621°8	613°3	612°2	615°0	625°0	626°0

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 641.

181°6	181°4	180°6	184°5	183°5	186°1	181°8	177°9	180°6	181°5	180°9	183°4	180°9
181°6	181°4	180°6	184°5	183°5	186°1	181°8	177°9	179°5	181°5	181°1	183°4	180°9
181°6	181°4	180°6	184°5	184°9	186°1	181°8	177°8	179°3	181°5	181°1	183°4	180°9
181°6	182°5	179°5	184°5	184°9	186°1	180°7	177°8	179°3	181°0	181°1	183°4	180°9
181°6	182°5	179°5	185°5	184°9	184°9	180°1	177°8	179°3	181°0	181°1	183°4	180°9
181°6	182°5	179°5	185°5	185°5	184°8	180°3	177°8	179°3	181°0	181°1	183°4	180°9
181°6	182°5	179°5	185°5	185°5	184°4	180°3	177°7	179°3	181°1	181°1	183°4	180°9
181°6	182°5	179°5	184°8	186°1	184°5	179°7	179°7	180°9	181°1	181°1	183°4	180°9
181°6	182°5	178°7	179°5	186°2	184°5	179°3	180°6	181°5	181°0	182°6	183°4	180°9
181°6	182°3	178°5	182°0	186°2	185°0	179°2	180°6	181°5	181°0	183°1	181°8	180°9
181°6	182°3	178°5	182°0	186°2	184°4	179°2	180°6	181°5	181°0	183°4	181°8	180°9
181°6	181°0	178°5	182°0	186°2	183°3	177°9	180°6	181°5	181°0	183°4	181°8	180°9

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Weather.	Mean Göttingen Time.		Barometer at 42°.	Thermometers.		Wind.		Weather.	
	D.	M.		Dry.	Wet.	Direction.	Force.		
	h.	m.		°.	°.				
	25	22	0	29°949	13°4	13°5	—	—	Calm.
		23	0	29°926	12°4	12°7	—	—	Calm.
	26	0	0	29°918	12°1	12°4	S.E. by E.	Very light.	Generally clear.
		1	0	29°920	12°2	12°3	S.E. by E.	Very light.	Generally clear.
		2	0	29°902	19°2	18°1	S.E. by E.	Very light.	Generally clear.
		3	0	29°883	26°3	24°1	S.E. by E.	Very light.	Generally clear.
		4	0	29°852	30°3	27°0	S.W. by S.	Very light.	Generally clear.
		5	0	29°827	31°1	26°7	S.W.	Light.	Clear.
		6	0	29°789	31°8	27°0	S.W.	Light.	Clear.
		7	0	29°744	33°5	27°7	S.S.W.	Light.	Clear.
		8	0	29°694	34°3	29°3	S.S.W.	Light.	Clear.
		9	0	29°656	34°3	29°6	S.W. by W.	Very light.	Clear.

March 22nd and 23rd.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0' 721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	107'8	109'0	110'4	109'7	114'6	115'5	116'4	114'4	116'9	117'6	116'6	116'6
5	0	108'0	107'8	110'6	108'5	115'4	115'4	115'8	114'7	117'6	117'4	116'6	116'6
10	0	108'4	107'4	109'8	110'4	115'8	116'3	117'0	116'4	117'5	117'2	116'4	116'4
15	0	108'3	107'2	110'0	110'4	116'0	116'5	118'0	117'6	118'3	117'6	116'3	116'3
20	0	108'8	108'3	109'4	111'8	117'7	116'6	117'7	117'6	118'4	117'2	116'3	116'3
25	0	108'4	108'7	109'4	113'4	116'2	117'8	115'7	117'2	119'0	116'9	116'0	116'0
30	0	108'3	109'4	110'1	114'4	115'4	119'7	114'0	116'0	119'4	116'9	116'0	116'0
35	0	107'7	108'8	111'3	116'0	115'8	119'0	115'0	117'6	119'4	116'6	115'4	116'6
40	0	107'6	109'4	111'3	117'4	116'4	116'4	115'8	117'4	118'4	116'9	117'2	116'6
45	0	109'2	108'7	110'6	117'5	115'9	114'4	115'4	117'0	117'4	116'6	116'4	116'6
50	0	109'9	108'6	109'5	117'5	114'8	114'4	115'6	116'4	117'6	116'6	116'3	116'3
55	0	109'5	108'9	109'5	111'5	114'0	115'9	115'9	116'4	117'8	116'5	116'3	116'3
M. s.		One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
		633'0	638'8	625'0	622'1	617'0	621'8	628'0	625'0	633'6	630'3	632'0	
2	0	633'8	610'8	626'0	620'8	617'2	622'0	626'2	621'5	633'0	630'0	632'1	
12	0	636'2	612'9	626'0	620'5	618'0	625'0	626'0	623'5	632'8	632'5	632'0	
17	0	635'6	612'0	622'4	620'0	614'8	626'4	627'8	626'0	632'0	631'0	633'0	
22	0	636'2	638'2	620'1	620'5	613'0	626'8	631'0	635'2	632'0	633'8	633'9	
27	0	638'9	637'0	618'8	620'4	612'8	627'0	630'0	637'0	628'5	631'0	631'0	
32	0	641'7	633'0	616'0	620'0	615'4	627'2	626'8	633'5	629'1	633'0	636'0	
37	0	641'3	631'4	617'0	620'0	617'0	630'0	625'0	635'4	631'0	633'0	633'0	
42	0	640'9	629'7	617'0	620'0	618'8	630'8	626'0	634'8	632'0	633'2	633'9	
47	0	636'1	629'1	618'3	620'2	621'0	628'0	627'0	635'0	631'6	633'2	633'1	
52	0	635'1	624'3	620'0	622'4	621'4	626'1	626'6	633'8	630'0	632'8	633'1	
57	0	636'1	621'0	621'0	623'0	621'2	626'2	626'0	634'8	630'0	632'0	633'0	
Thermometer		51'6	51'9	51'6	51'1	50'6	50'5	50'5	50'6	50'7	51'5	52'4	
M. s.		One Scale Division = '000061 parts of the V. F.						VERTICAL FORCE.					
		175'2	175'5	171'7	173'8	173'3	173'1	173'2	171'7	166'9	166'2	164'7	
3	0	175'7	175'5 <td>171'7 <td>173'8 <td>173'3 <td>173'1 <td>173'0 <td>171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td></td></td></td></td></td></td>	171'7 <td>173'8 <td>173'3 <td>173'1 <td>173'0 <td>171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td></td></td></td></td></td>	173'8 <td>173'3 <td>173'1 <td>173'0 <td>171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td></td></td></td></td>	173'3 <td>173'1 <td>173'0 <td>171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td></td></td></td>	173'1 <td>173'0 <td>171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td></td></td>	173'0 <td>171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td></td>	171'9 <td>166'9 <td>166'2 <td>164'7</td> </td></td>	166'9 <td>166'2 <td>164'7</td> </td>	166'2 <td>164'7</td>	164'7	
8	0	175'8	175'5 <td>175'5 <td>173'8 <td>173'2 <td>173'1 <td>170'5 <td>171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td></td></td></td></td></td></td>	175'5 <td>173'8 <td>173'2 <td>173'1 <td>170'5 <td>171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td></td></td></td></td></td>	173'8 <td>173'2 <td>173'1 <td>170'5 <td>171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td></td></td></td></td>	173'2 <td>173'1 <td>170'5 <td>171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td></td></td></td>	173'1 <td>170'5 <td>171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td></td></td>	170'5 <td>171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td></td>	171'9 <td>166'9 <td>166'3 <td>164'0</td> </td></td>	166'9 <td>166'3 <td>164'0</td> </td>	166'3 <td>164'0</td>	164'0	
13	0	175'7	175'5 <td>175'5 <td>173'7 <td>173'2 <td>173'0 <td>170'5 <td>172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td></td></td></td>	175'5 <td>173'7 <td>173'2 <td>173'0 <td>170'5 <td>172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td></td></td>	173'7 <td>173'2 <td>173'0 <td>170'5 <td>172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td></td>	173'2 <td>173'0 <td>170'5 <td>172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td>	173'0 <td>170'5 <td>172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td>	170'5 <td>172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td>	172'7 <td>166'9 <td>166'3 <td>164'1</td> </td></td>	166'9 <td>166'3 <td>164'1</td> </td>	166'3 <td>164'1</td>	164'1	
18	0	176'0	175'5 <td>175'2 <td>173'7 <td>173'5 <td>173'0 <td>170'5 <td>172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td></td></td></td>	175'2 <td>173'7 <td>173'5 <td>173'0 <td>170'5 <td>172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td></td></td>	173'7 <td>173'5 <td>173'0 <td>170'5 <td>172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td></td>	173'5 <td>173'0 <td>170'5 <td>172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td></td>	173'0 <td>170'5 <td>172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td></td>	170'5 <td>172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td></td>	172'9 <td>166'9 <td>166'3 <td>164'1</td> </td></td>	166'9 <td>166'3 <td>164'1</td> </td>	166'3 <td>164'1</td>	164'1	
23	0	176'0	174'8 <td>175'2 <td>173'7 <td>173'5 <td>173'2 <td>170'4 <td>169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td></td></td></td></td></td></td>	175'2 <td>173'7 <td>173'5 <td>173'2 <td>170'4 <td>169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td></td></td></td></td></td>	173'7 <td>173'5 <td>173'2 <td>170'4 <td>169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td></td></td></td></td>	173'5 <td>173'2 <td>170'4 <td>169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td></td></td></td>	173'2 <td>170'4 <td>169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td></td></td>	170'4 <td>169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td></td>	169'4 <td>166'9 <td>165'5 <td>164'1</td> </td></td>	166'9 <td>165'5 <td>164'1</td> </td>	165'5 <td>164'1</td>	164'1	
28	0	176'0	174'6 <td>174'5 <td>173'7 <td>173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'7 <td>173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td></td>	173'7 <td>173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td>	173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td>	173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td>	170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td>	169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td>	166'9 <td>165'8 <td>164'0</td> </td>	165'8 <td>164'0</td>	164'0	
33	0	176'0	174'6 <td>174'5 <td>173'7 <td>173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'7 <td>173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td></td>	173'7 <td>173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td>	173'5 <td>173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td>	173'2 <td>170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td>	170'2 <td>169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td>	169'4 <td>166'9 <td>165'8 <td>164'0</td> </td></td>	166'9 <td>165'8 <td>164'0</td> </td>	165'8 <td>164'0</td>	164'0	
38	0	176'0	174'6 <td>174'5 <td>173'5 <td>173'3 <td>172'5 <td>170'2 <td>166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'5 <td>173'3 <td>172'5 <td>170'2 <td>166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td></td>	173'5 <td>173'3 <td>172'5 <td>170'2 <td>166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td></td>	173'3 <td>172'5 <td>170'2 <td>166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td></td>	172'5 <td>170'2 <td>166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td></td>	170'2 <td>166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td></td>	166'9 <td>166'9 <td>165'8 <td>164'0</td> </td></td>	166'9 <td>165'8 <td>164'0</td> </td>	165'8 <td>164'0</td>	164'0	
43	0	175'3	174'6 <td>174'5 <td>173'3 <td>173'3 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'3 <td>173'3 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td></td></td></td></td></td>	173'3 <td>173'3 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td></td></td></td></td>	173'3 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td></td></td></td>	172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td></td></td>	171'7 <td>166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td></td>	166'9 <td>166'2 <td>165'6 <td>165'0</td> </td></td>	166'2 <td>165'6 <td>165'0</td> </td>	165'6 <td>165'0</td>	165'0	
48	0	174'5	174'6 <td>174'5 <td>173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td></td></td></td></td></td>	173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td></td></td></td></td>	173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td></td></td></td>	172'3 <td>171'7 <td>166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td></td></td>	171'7 <td>166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td></td>	166'9 <td>166'2 <td>165'4 <td>165'0</td> </td></td>	166'2 <td>165'4 <td>165'0</td> </td>	165'4 <td>165'0</td>	165'0	
53	0	174'5	174'6 <td>174'5 <td>173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td></td></td>	173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td></td>	173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td>	172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td>	171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td>	166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td>	166'2 <td>164'6 <td>165'0</td> </td>	164'6 <td>165'0</td>	165'0	
58	0	174'5	173'8 <td>174'5 <td>173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td></td></td></td>	174'5 <td>173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td></td></td>	173'3 <td>173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td></td>	173'8 <td>172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td></td>	172'3 <td>171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td></td>	171'7 <td>166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td></td>	166'9 <td>166'2 <td>164'6 <td>165'0</td> </td></td>	166'2 <td>164'6 <td>165'0</td> </td>	164'6 <td>165'0</td>	165'0	
Thermometer		50'8	51'3	51'1	52'0	51'6	52'2	52'2	51'9	52'0	53'0	54'2	
Increasing Numbers denote decreasing Westerly Declination.													
METEOROLOGICAL OBSERVATIONS.													
Mean Göttingen Time.			Barometer at 34°.	Thermometers.		Wind.		Weather.					
				Dry.	Wet.	Direction.	Force.						
D.	H.	M.	In.	°	°								
22	10	0	29'653	37'1	33'6	—	—	Clouded; cir.-cum. and cum.-strat.					
	11	0	29'641	36'1	32'5	—	—	Clouded.					
	12	0	29'619	34'9	32'1	—	—	Clouded.					
	13	0	29'617	33'8	31'3	—	—	Clouded.					
	14	0	29'616	32'8	31'1	—	—	Cir.-cum. and cum.-strat.					
	15	0	29'654	32'9	30'3	—	—	Cir.-cum. and cir.-strat.					
	16	0	29'664	32'4	30'1	—	—	Cir.-cum. and cir.-strat.					
	17	0	29'666	32'7	30'5	—	—	Cir.-cum. and cir.-strat.					
	18	0	29'666	32'7	30'3	—	—	Cir.-cum. and cir.-strat.					
	19	0	29'670	33'1	30'4	—	—	Cir.-cum. and cir.-strat.					
	20	0	29'689	32'4	30'5	—	—	Cir.-cum. and cir.-strat.					
	21	0	29'678	32'9	30'5	—	—	Cir. and cir.-cum.					

\* At 23° 10', Thermometer of H. F., 53° 6'; of V. F., 53° 0'.

MAGNETICAL OBSERVATIONS.

March 22nd and 23rd.

DECLINATION.

Angular Value of one Scale Division = 0°721.

21°.		22°.		23°.		0°.		1°.		2°.		3°.		4°.		5°.		6°.		7°.		8°.		9°.	
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
117°6	117°6	117°4	117°4	119°4	122°4	125°4	123°6	121°5	117°0	112°4	106°4	101°6	104°6	117°6	111°6	105°7	101°0	105°2	117°6	111°6	105°7	101°0	105°2	117°6	111°6
117°4	116°6	117°3	118°4	119°6	123°2	125°4	123°4	121°4	116°6	111°6	105°7	101°0	105°2	117°6	111°6	105°7	101°0	105°2	117°6	111°6	105°7	101°0	105°2	117°6	111°6
117°2	116°4	117°3	119°2	120°2	123°1	123°7	123°4	121°5	116°2	110°6	105°6	102°4	105°6	116°4	110°6	105°6	102°4	105°6	116°4	110°6	105°6	102°4	105°6	116°4	110°6
117°6	116°3	117°3	119°0	120°4	123°3	124°4	122°5	121°5	115°8	110°4	105°4	102°2	106°0	116°4	110°4	105°4	102°2	106°0	116°4	110°4	105°4	102°2	106°0	116°4	110°4
117°2	116°3	117°4	118°6	120°4	123°5	126°3	122°4	121°4	115°0	110°0	105°4	102°2	106°4	116°4	110°0	105°4	102°2	106°4	116°4	110°0	105°4	102°2	106°4	116°4	110°0
116°9	116°0	117°6	118°2	120°6	123°8	126°0	123°4	120°8	113°5	109°0	105°0	102°0	106°4	116°4	109°0	105°0	102°0	106°4	116°4	109°0	105°0	102°0	106°4	116°4	109°0
116°9	116°0	117°4	118°4	121°0	123°6	126°6	123°4	120°0	114°0	108°6	105°5	102°2	106°4	116°4	108°6	105°5	102°2	106°4	116°4	108°6	105°5	102°2	106°4	116°4	108°6
116°6	115°4	117°4	118°4	121°8	124°3	126°7	122°8	120°2	114°0	108°2	105°5	102°6	106°8	116°8	108°2	105°5	102°6	106°8	116°8	108°2	105°5	102°6	106°8	116°8	108°2
116°9	117°2	117°4	118°4	121°2	125°3	126°4	123°0	118°5	113°0	107°8	105°0	102°6	107°2	116°2	107°8	105°0	102°6	107°2	116°2	107°8	105°0	102°6	107°2	116°2	107°8
116°6	116°4	117°0	118°8	121°6	125°4	126°4	123°0	118°4	112°9	107°6	104°3	101°2	107°6	116°6	107°6	104°3	101°2	107°6	116°6	107°6	104°3	101°2	107°6	116°6	107°6
116°6	116°3	117°2	118°8	121°8	125°5	124°7	123°4	118°4	112°8	106°6	104°3	101°0	108°2	116°6	106°6	104°3	101°0	108°2	116°6	106°6	104°3	101°0	108°2	116°6	106°6
116°5	116°3	117°2	116°4	119°2	122°2	126°1	123°4	122°4	117°7	112°6	103°7	101°0	108°4	116°6	103°7	101°0	108°4	116°6	103°7	101°0	108°4	116°6	103°7	101°0	108°4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

633°0	633°0	633°0	633°5	631°4	626°8	623°0	613°0	610°0	609°6	612°6	619°0	615°8		
632°2	633°0	632°8	631°8	631°2	626°4	623°0	612°0	610°0	609°0	615°0	619°2	617°4		
631°5	633°0	631°8	631°4	630°9	628°3	622°0	611°8	610°2	609°0	617°0	624°4	615°8		
632°0	633°0	632°0	632°8	631°0	626°2	622°0	611°0	609°5	608°5	616°2	623°2	618°8		
631°9	632°2	632°4	633°2	630°6	625°0	622°0	611°5	609°0	608°4	619°9	622°2	621°2		
632°0	632°4	633°0	632°5	630°3	623°5	618°0	610°0	609°0	608°7	623°0	619°8	624°4		
632°0	632°4	633°4	632°2	630°0	622°3	617°8	610°8	608°5	608°7	625°0	618°2	624°8		
632°5	632°0	634°2	632°0	630°1	621°6	618°0	611°5	608°8	609°0	623°0	616°8	624°4		
633°0	633°2	634°2	632°2	629°2	620°2	615°6	611°0	607°8	609°6	622°1	617°0	626°8		
633°2	633°0	634°0	632°4	628°3	610°0	615°0	610°0	607°5	610°0	619°1	617°2	626°0		
632°8	633°0	634°0	632°0	627°4	622°0	615°0	610°5	607°0	611°6	618°0	617°2	631°0		
632°0	632°8	634°2	631°5	631°8	625°0	622°0	614°0	609°0	612°0	617°3	616°5	631°2		
51°5	52°4	52°9	53°1	53°5	53°6	52°8	52°0	51°5	52°1	52°7	52°9	53°0	52°5	52°6

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

165°0	164°9	164°4	165°0	170°3	171°4	172°0	173°0	171°0	169°5	170°6	171°4	168°5
165°0	164°9	164°3	165°4	170°3	171°4	172°0	172°5	171°0	169°5	170°6	171°4	168°5
165°0	164°9	164°1	165°3	169°3	171°4	172°0	172°5	171°0	169°5	170°6	171°7	169°4
165°0	164°9	165°0	165°3	169°3	171°4	173°0	172°5	170°4	169°5	171°4	171°1	169°4
165°4	164°8	165°0	165°6	169°3	171°4	173°0	172°5	170°4	169°5	171°4	170°9	170°4
165°4	164°8	165°0	165°6	169°3	171°4	173°0	172°0	170°4	169°5	171°4	170°9	170°3
165°4	164°8	165°0	165°0	170°3	171°4	173°0	172°0	170°4	169°5	171°4	170°9	170°3
165°4	164°8	165°0	165°0	170°3	171°4	173°0	172°0	169°5	169°6	171°4	170°9	168°2
165°4	164°8	165°0	165°0	170°3	171°4	173°0	171°0	169°5	169°6	171°4	170°3	167°7
165°4	164°8	165°0	165°5	170°3	172°0	173°0	171°0	169°5	169°6	171°4	169°6	168°7
165°4	164°6	165°0	168°1	170°3	172°0	173°0	171°0	169°5	169°6	171°4	169°6	169°3
164°9	164°5	165°0	168°7	170°3	172°0	173°0	171°0	169°5	169°6	171°4	169°6	168°9
51°2	51°2	51°4	51°4	53°4	52°2	51°5	51°8	52°2	52°8	52°8	52°4	52°2

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.		
				Force.		
D. H. M.	In.	°	°			
22 22 0	29°691	33°4	30°7	—	—	Calm.
23 0 0	29°708	33°7	30°6	N. by E.	Very light.	Cir. and cir.-cum.
23 0 0	29°734	33°7	30°7	N. by E.	Very light.	Mostly clouded till 7 <sup>h</sup> ; remainder clear.
1 0 0	29°756	33°9	30°7	N. by E.	Very light.	Clouded.
2 0 0	29°778	34°7	30°7	N.N.E.	Very light.	Clouded.
3 0 0	29°782	35°1	31°3	N. by E.	Very light.	Clouded.
4 0 0	29°802	37°8	33°1	N. by E.	Very light.	Clouded.
5 0 0	29°792	39°4	33°4	N.N.E.	Very light.	Clouded.
6 0 0	29°827	40°2	36°1	S.S.W.	Very light.	Clear and unclouded.
7 0 0	29°828	41°2	36°9	E.	Light.	Clear and unclouded.
8 0 0	29°806	39°5	35°5	S.S.E.	Light.	Clear and unclouded.
9 0 0	29°808	40°2	36°1	S. by W.	Very light.	Clear and unclouded.

April 19th and 20th. MAGNETICAL OBSERVATIONS.													
Mean Göttingen Time.		Angular Value of one Scale Division = 0'721.										DECLINATION.	
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0	0	111'5	113'2	113'8	114'4	115'0	115'7	116'3	116'6	117'4	119'0	119'9	
5	0	111'4	113'8	113'8	114'5	115'5	115'7	116'7	116'7	117'4	119'2	119'6	
10	0	111'8	111'2	113'4	111'3	115'6	116'0	117'3	117'3	117'4	119'8	119'8	
15	0	112'2	111'4	113'4	114'7	116'3	116'4	116'7	116'7	117'6	120'2	119'8	
20	0	112'4	111'0	113'4	115'3	116'4	116'4	117'0	117'6	117'6	120'0	119'2	
25	0	112'4	114'4	113'4	115'5	116'4	115'7	117'0	117'6	117'6	120'2	119'7	
30	0	112'6	115'0	113'2	115'5	115'5	115'6	117'4	117'7	117'7	120'0	118'6	
35	0	112'8	113'4	113'4	115'7	115'5	115'5	117'4	117'8	119'4	118'4	118'2	
40	0	113'2	113'4	113'4	115'7	115'5	116'4	117'4	118'0	119'2	118'4	117'9	
45	0	112'8	114'2	114'2	115'7	115'5	116'1	117'3	118'0	120'6	118'2	118'0	
50	0	112'8	113'4	114'2	116'2	115'8	116'5	117'3	118'4	119'6	118'4	118'4	
55	0	113'4	113'4	114'4	115'8	116'0	116'9	117'4	118'4	119'4	118'2	118'5	

M. S.		One Scale Division = 0'00087 parts of the H. F.										HORIZONTAL FORCE.	
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
2	0	642'4	645'0	640'2	631'9	636'0	636'0	636'1	636'9	637'0	639'0	638'5	
7	0	643'8	643'2	639'8	632'2	636'0	635'0	636'3	637'0	637'4	638'5	638'5	
12	0	646'4	642'4	640'0	632'0	636'0	634'0	637'0	637'0	638'0	638'0	638'0	
17	0	647'4	642'0	639'8	633'0	636'0	636'0	637'0	637'0	639'2	637'8	638'0	
22	0	649'8	643'0	638'8	633'4	636'0	637'0	636'0	636'0	639'6	638'0	638'0	
27	0	649'5	642'8	639'2	634'0	636'8	636'2	636'0	635'9	639'6	637'8	638'0	
32	0	650'0	642'0	638'6	633'4	636'2	636'2	636'0	636'0	639'4	637'8	637'8	
37	0	650'0	641'8	637'8	634'0	636'0	636'3	636'2	636'0	640'0	638'0	638'0	
42	0	647'8	641'4	634'4	634'0	636'0	636'1	635'8	636'0	640'6	638'2	638'0	
47	0	646'8	641'2	635'0	634'4	635'0	636'8	635'6	636'0	641'0	638'3	638'0	
52	0	645'0	642'2	633'2	635'0	635'0	636'8	635'5	636'4	641'0	638'0	638'0	
57	0	644'8	641'0	632'8	636'0	636'0	637'2	635'2	636'5	640'2	638'5	640'0	

Thermometer	51'7	51'9	52'2	52'0	51'5	51'0	50'5	49'9	49'0	48'9	48'3		
M.	S.	One Scale Division = 0'00063 parts of the V. F.										VERTICAL FORCE.	
3	0	172'4	172'5	173'5	171'5	170'4	169'2	168'8	169'6	169'8	169'7	171'3	
8	0	171'8	172'8	173'7	173'9	170'4	169'2	168'8	169'6	169'8	169'7	171'3	
13	0	171'7	172'8	174'6	173'7	170'4	169'2	168'8	169'6	169'4	169'7	171'3	
18	0	171'7	173'0	173'8	173'4	170'4	169'2	168'8	169'6	169'4	169'7	171'3	
23	0	171'7	173'0	173'9	172'8	170'4	169'2	168'8	169'6	169'4	170'5	171'3	
28	0	171'7	172'9	173'9	172'3	170'4	169'2	168'8	169'6	169'4	170'5	171'3	
33	0	172'8	172'9	173'8	172'0	170'4	168'6	168'8	169'6	169'4	170'5	171'5	
38	0	172'8	173'3	173'6	172'0	169'6	168'6	168'8	169'6	169'4	170'6	171'9	
43	0	171'6	173'3	173'4	172'0	169'6	168'6	168'8	169'8	169'4	170'7	171'9	
48	0	171'6	173'7	173'2	171'8	169'6	168'6	168'8	169'8	169'4	170'9	171'9	
53	0	172'3	173'7	173'2	171'0	169'6	168'6	168'8	169'8	169'4	171'3	171'9	
58	0	172'7	173'0	173'8	171'0	169'6	168'6	168'8	169'8	169'4	171'3	171'9	

Thermometer											
50'2	50'8	51'0	51'2	52'2	52'2	51'7	51'0	50'2	50'0	49'5	
Increasing Numbers denote decreasing Westerly Declination.											

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.			
				Dry.	Wet.	Direction.	Force.				
D.	H.	M.	In.	°	°						
19	10	0	30'028	38'2	33'0	S.S.W.	Very light.	Quite clear all day.			
	11	0	30'022	39'6	34'2	S.S.W.	Very light.	Quite clear all day.			
	12	0	30'013	38'6	33'7	S.W.	Very light.	Quite clear all day.			
	13	0	30'011	35'9	31'7	—	—	Calm.			
	14	0	30'011	33'0	29'4	—	—	Calm.			
	15	0	30'012	34'5	30'4	—	—	Calm.			
	16	0	30'011	34'2	27'5	—	—	Calm.			
	17	0	30'005	27'8	26'0	—	—	Calm.			
	18	0	30'004	27'1	25'3	—	—	Calm.			
	19	0	29'990	25'9	24'7	—	—	Calm.			
	20	0	29'990	25'0	24'0	—	—	Calm.			
	21	0	29'986	26'9	24'0	—	—	Calm.			

\* At 20<sup>h</sup> 10<sup>h</sup>, Thermometer of H. F., 54° 0'; of V. F., 53° 0'.



ION.

19 <sup>h</sup> .	20 <sup>h</sup> .
Sc. Div.	Sc. Div.
119 <sup>h</sup> 9	118 <sup>h</sup> 2
119 <sup>h</sup> 6	117 <sup>h</sup> 8
119 <sup>h</sup> 8	118 <sup>h</sup> 2
119 <sup>h</sup> 8	118 <sup>h</sup> 2
119 <sup>h</sup> 2	118 <sup>h</sup> 2
119 <sup>h</sup> 7	118 <sup>h</sup> 1
118 <sup>h</sup> 6	118 <sup>h</sup> 0
118 <sup>h</sup> 4	118 <sup>h</sup> 2
118 <sup>h</sup> 4	117 <sup>h</sup> 9
118 <sup>h</sup> 2	118 <sup>h</sup> 0
118 <sup>h</sup> 4	118 <sup>h</sup> 1
118 <sup>h</sup> 2	118 <sup>h</sup> 5

MAGNETICAL OBSERVATIONS. April 19th and 20th.

DECLINATION. Angular Value of one Scale Division = 0<sup>h</sup> 721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
118 <sup>h</sup> 4	119 <sup>h</sup> 0	118 <sup>h</sup> 3	121 <sup>h</sup> 4	122 <sup>h</sup> 6	122 <sup>h</sup> 4	122 <sup>h</sup> 7	120 <sup>h</sup> 4	117 <sup>h</sup> 2	113 <sup>h</sup> 9	109 <sup>h</sup> 6	107 <sup>h</sup> 2	108 <sup>h</sup> 3
118 <sup>h</sup> 4	119 <sup>h</sup> 2	118 <sup>h</sup> 4	121 <sup>h</sup> 4	122 <sup>h</sup> 4	123 <sup>h</sup> 2	122 <sup>h</sup> 4	120 <sup>h</sup> 4	116 <sup>h</sup> 5	113 <sup>h</sup> 2	109 <sup>h</sup> 2	107 <sup>h</sup> 4	108 <sup>h</sup> 2
118 <sup>h</sup> 5	119 <sup>h</sup> 4	119 <sup>h</sup> 0	121 <sup>h</sup> 5	122 <sup>h</sup> 4	123 <sup>h</sup> 4	122 <sup>h</sup> 4	120 <sup>h</sup> 0	116 <sup>h</sup> 1	112 <sup>h</sup> 9	108 <sup>h</sup> 6	107 <sup>h</sup> 2	108 <sup>h</sup> 4
118 <sup>h</sup> 5	118 <sup>h</sup> 7	119 <sup>h</sup> 3	121 <sup>h</sup> 6	122 <sup>h</sup> 4	123 <sup>h</sup> 6	121 <sup>h</sup> 7	119 <sup>h</sup> 4	116 <sup>h</sup> 2	113 <sup>h</sup> 7	108 <sup>h</sup> 6	107 <sup>h</sup> 0	108 <sup>h</sup> 6
118 <sup>h</sup> 4	117 <sup>h</sup> 6	119 <sup>h</sup> 5	121 <sup>h</sup> 6	122 <sup>h</sup> 4	123 <sup>h</sup> 4	121 <sup>h</sup> 7	119 <sup>h</sup> 1	115 <sup>h</sup> 8	112 <sup>h</sup> 4	108 <sup>h</sup> 2	107 <sup>h</sup> 2	108 <sup>h</sup> 4
118 <sup>h</sup> 4	117 <sup>h</sup> 0	120 <sup>h</sup> 4	121 <sup>h</sup> 6	122 <sup>h</sup> 4	123 <sup>h</sup> 4	121 <sup>h</sup> 8	118 <sup>h</sup> 4	114 <sup>h</sup> 8	112 <sup>h</sup> 2	107 <sup>h</sup> 6	107 <sup>h</sup> 0	108 <sup>h</sup> 4
118 <sup>h</sup> 4	116 <sup>h</sup> 4	120 <sup>h</sup> 6	121 <sup>h</sup> 6	122 <sup>h</sup> 4	123 <sup>h</sup> 4	122 <sup>h</sup> 1	117 <sup>h</sup> 8	114 <sup>h</sup> 1	112 <sup>h</sup> 0	107 <sup>h</sup> 4	107 <sup>h</sup> 4	108 <sup>h</sup> 4
118 <sup>h</sup> 6	116 <sup>h</sup> 4	121 <sup>h</sup> 2	121 <sup>h</sup> 6	122 <sup>h</sup> 4	123 <sup>h</sup> 4	121 <sup>h</sup> 6	117 <sup>h</sup> 6	114 <sup>h</sup> 2	111 <sup>h</sup> 6	107 <sup>h</sup> 6	107 <sup>h</sup> 4	108 <sup>h</sup> 6
119 <sup>h</sup> 2	116 <sup>h</sup> 9	121 <sup>h</sup> 2	122 <sup>h</sup> 4	122 <sup>h</sup> 4	123 <sup>h</sup> 5	121 <sup>h</sup> 5	117 <sup>h</sup> 4	113 <sup>h</sup> 6	110 <sup>h</sup> 6	107 <sup>h</sup> 6	107 <sup>h</sup> 4	109 <sup>h</sup> 6
118 <sup>h</sup> 8	117 <sup>h</sup> 4	121 <sup>h</sup> 4	122 <sup>h</sup> 5	122 <sup>h</sup> 2	123 <sup>h</sup> 4	121 <sup>h</sup> 4	117 <sup>h</sup> 6	113 <sup>h</sup> 4	110 <sup>h</sup> 2	107 <sup>h</sup> 4	107 <sup>h</sup> 6	108 <sup>h</sup> 8
118 <sup>h</sup> 6	117 <sup>h</sup> 6	121 <sup>h</sup> 6	122 <sup>h</sup> 5	122 <sup>h</sup> 2	123 <sup>h</sup> 4	121 <sup>h</sup> 4	117 <sup>h</sup> 4	114 <sup>h</sup> 2	110 <sup>h</sup> 4	107 <sup>h</sup> 4	107 <sup>h</sup> 7	109 <sup>h</sup> 4
118 <sup>h</sup> 6	117 <sup>h</sup> 6	121 <sup>h</sup> 6	122 <sup>h</sup> 6	122 <sup>h</sup> 0	123 <sup>h</sup> 0	121 <sup>h</sup> 0	117 <sup>h</sup> 0	114 <sup>h</sup> 0	110 <sup>h</sup> 2	107 <sup>h</sup> 4	108 <sup>h</sup> 0	109 <sup>h</sup> 4

HORIZONTAL FORCE.

639 <sup>h</sup> 0	638 <sup>h</sup> 5
638 <sup>h</sup> 5	638 <sup>h</sup> 5
638 <sup>h</sup> 0	638 <sup>h</sup> 0
637 <sup>h</sup> 8	638 <sup>h</sup> 0
638 <sup>h</sup> 0	638 <sup>h</sup> 0
637 <sup>h</sup> 8	638 <sup>h</sup> 0
637 <sup>h</sup> 8	637 <sup>h</sup> 8
638 <sup>h</sup> 0	638 <sup>h</sup> 0
638 <sup>h</sup> 2	638 <sup>h</sup> 0
638 <sup>h</sup> 4	638 <sup>h</sup> 0
638 <sup>h</sup> 0	638 <sup>h</sup> 0
638 <sup>h</sup> 5	640 <sup>h</sup> 0
48 <sup>h</sup> 9	48 <sup>h</sup> 3

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1<sup>o</sup> decrease of Temperature, 1<sup>h</sup> 63.

639 <sup>h</sup> 0	637 <sup>h</sup> 0	642 <sup>h</sup> 0	643 <sup>h</sup> 0	611 <sup>h</sup> 5	638 <sup>h</sup> 2	630 <sup>h</sup> 0	623 <sup>h</sup> 5	618 <sup>h</sup> 0	621 <sup>h</sup> 0	622 <sup>h</sup> 0	628 <sup>h</sup> 0	631 <sup>h</sup> 0
639 <sup>h</sup> 5	638 <sup>h</sup> 0	643 <sup>h</sup> 0	645 <sup>h</sup> 0	611 <sup>h</sup> 2	636 <sup>h</sup> 8	628 <sup>h</sup> 4	622 <sup>h</sup> 2	618 <sup>h</sup> 0	623 <sup>h</sup> 0	622 <sup>h</sup> 6	627 <sup>h</sup> 0	636 <sup>h</sup> 0
639 <sup>h</sup> 0	638 <sup>h</sup> 0	642 <sup>h</sup> 0	643 <sup>h</sup> 7	612 <sup>h</sup> 2	636 <sup>h</sup> 8	628 <sup>h</sup> 0	619 <sup>h</sup> 0	620 <sup>h</sup> 2	624 <sup>h</sup> 0	623 <sup>h</sup> 0	630 <sup>h</sup> 0	635 <sup>h</sup> 0
639 <sup>h</sup> 0	639 <sup>h</sup> 4	643 <sup>h</sup> 0	643 <sup>h</sup> 5	611 <sup>h</sup> 2	636 <sup>h</sup> 2	627 <sup>h</sup> 1	618 <sup>h</sup> 8	620 <sup>h</sup> 0	625 <sup>h</sup> 0	623 <sup>h</sup> 2	631 <sup>h</sup> 5	635 <sup>h</sup> 0
639 <sup>h</sup> 0	639 <sup>h</sup> 0	642 <sup>h</sup> 5	642 <sup>h</sup> 5	641 <sup>h</sup> 2	635 <sup>h</sup> 0	627 <sup>h</sup> 8	620 <sup>h</sup> 0	622 <sup>h</sup> 0	626 <sup>h</sup> 0	622 <sup>h</sup> 0	631 <sup>h</sup> 8	636 <sup>h</sup> 0
638 <sup>h</sup> 9	637 <sup>h</sup> 5	642 <sup>h</sup> 2	643 <sup>h</sup> 5	640 <sup>h</sup> 8	631 <sup>h</sup> 4	627 <sup>h</sup> 7	618 <sup>h</sup> 5	621 <sup>h</sup> 0	625 <sup>h</sup> 0	623 <sup>h</sup> 0	628 <sup>h</sup> 1	639 <sup>h</sup> 0
638 <sup>h</sup> 5	637 <sup>h</sup> 5	642 <sup>h</sup> 0	642 <sup>h</sup> 0	640 <sup>h</sup> 2	633 <sup>h</sup> 8	626 <sup>h</sup> 0	618 <sup>h</sup> 1	620 <sup>h</sup> 0	625 <sup>h</sup> 0	626 <sup>h</sup> 8	628 <sup>h</sup> 5	642 <sup>h</sup> 5
638 <sup>h</sup> 0	638 <sup>h</sup> 0	641 <sup>h</sup> 0	642 <sup>h</sup> 5	640 <sup>h</sup> 0	633 <sup>h</sup> 2	625 <sup>h</sup> 9	619 <sup>h</sup> 0	620 <sup>h</sup> 0	626 <sup>h</sup> 0	627 <sup>h</sup> 7	630 <sup>h</sup> 0	644 <sup>h</sup> 0
638 <sup>h</sup> 0	638 <sup>h</sup> 5	642 <sup>h</sup> 0	643 <sup>h</sup> 0	639 <sup>h</sup> 2	632 <sup>h</sup> 8	625 <sup>h</sup> 0	621 <sup>h</sup> 0	626 <sup>h</sup> 0	626 <sup>h</sup> 0	627 <sup>h</sup> 7	628 <sup>h</sup> 7	643 <sup>h</sup> 2
638 <sup>h</sup> 0	639 <sup>h</sup> 2	643 <sup>h</sup> 0	643 <sup>h</sup> 0	639 <sup>h</sup> 2	631 <sup>h</sup> 4	625 <sup>h</sup> 0	620 <sup>h</sup> 0	623 <sup>h</sup> 0	625 <sup>h</sup> 0	625 <sup>h</sup> 0	628 <sup>h</sup> 5	641 <sup>h</sup> 0
638 <sup>h</sup> 1	641 <sup>h</sup> 0	643 <sup>h</sup> 2	642 <sup>h</sup> 0	639 <sup>h</sup> 2	631 <sup>h</sup> 2	624 <sup>h</sup> 8	618 <sup>h</sup> 5	623 <sup>h</sup> 4	626 <sup>h</sup> 5	627 <sup>h</sup> 0	629 <sup>h</sup> 0	638 <sup>h</sup> 5
638 <sup>h</sup> 1	642 <sup>h</sup> 0	641 <sup>h</sup> 0	642 <sup>h</sup> 0	639 <sup>h</sup> 2	629 <sup>h</sup> 8	623 <sup>h</sup> 8	618 <sup>h</sup> 0	626 <sup>h</sup> 0	625 <sup>h</sup> 5	629 <sup>h</sup> 0	631 <sup>h</sup> 9	639 <sup>h</sup> 0
48 <sup>h</sup> 1	47 <sup>h</sup> 8	47 <sup>h</sup> 5	47 <sup>h</sup> 4	48 <sup>h</sup> 0	49 <sup>h</sup> 2	49 <sup>h</sup> 8	50 <sup>h</sup> 3	51 <sup>h</sup> 0	51 <sup>h</sup> 4	51 <sup>h</sup> 8	52 <sup>h</sup> 4	53 <sup>h</sup> 0

VERTICAL FORCE.

169 <sup>h</sup> 7	171 <sup>h</sup> 3
169 <sup>h</sup> 7	171 <sup>h</sup> 3
169 <sup>h</sup> 7	171 <sup>h</sup> 3
169 <sup>h</sup> 7	171 <sup>h</sup> 3
170 <sup>h</sup> 5	171 <sup>h</sup> 3
170 <sup>h</sup> 5	171 <sup>h</sup> 3
170 <sup>h</sup> 5	171 <sup>h</sup> 3
170 <sup>h</sup> 6	171 <sup>h</sup> 9
170 <sup>h</sup> 7	171 <sup>h</sup> 9
170 <sup>h</sup> 9	171 <sup>h</sup> 9
171 <sup>h</sup> 3	171 <sup>h</sup> 9
171 <sup>h</sup> 3	171 <sup>h</sup> 9
171 <sup>h</sup> 3	171 <sup>h</sup> 9
50 <sup>h</sup> 0	49 <sup>h</sup> 5

VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1<sup>o</sup> decrease of Temperature, 1<sup>h</sup> 61.

171 <sup>h</sup> 9	171 <sup>h</sup> 3	172 <sup>h</sup> 5	175 <sup>h</sup> 4	173 <sup>h</sup> 9	171 <sup>h</sup> 3	169 <sup>h</sup> 9	170 <sup>h</sup> 4	169 <sup>h</sup> 0	169 <sup>h</sup> 5	169 <sup>h</sup> 9	169 <sup>h</sup> 5	169 <sup>h</sup> 6
171 <sup>h</sup> 9	171 <sup>h</sup> 9	172 <sup>h</sup> 9	175 <sup>h</sup> 4	173 <sup>h</sup> 8	171 <sup>h</sup> 5	169 <sup>h</sup> 9	169 <sup>h</sup> 5	169 <sup>h</sup> 0	169 <sup>h</sup> 1	169 <sup>h</sup> 9	169 <sup>h</sup> 5	169 <sup>h</sup> 6
171 <sup>h</sup> 9	171 <sup>h</sup> 9	172 <sup>h</sup> 9	175 <sup>h</sup> 4	173 <sup>h</sup> 8	171 <sup>h</sup> 5	169 <sup>h</sup> 9	169 <sup>h</sup> 5	169 <sup>h</sup> 0	169 <sup>h</sup> 4	169 <sup>h</sup> 9	169 <sup>h</sup> 5	169 <sup>h</sup> 6
171 <sup>h</sup> 9	171 <sup>h</sup> 9	172 <sup>h</sup> 9	175 <sup>h</sup> 4	173 <sup>h</sup> 1	170 <sup>h</sup> 6	170 <sup>h</sup> 8	169 <sup>h</sup> 8	169 <sup>h</sup> 0	169 <sup>h</sup> 4	169 <sup>h</sup> 9	169 <sup>h</sup> 5	169 <sup>h</sup> 6
171 <sup>h</sup> 9	171 <sup>h</sup> 9	172 <sup>h</sup> 9	175 <sup>h</sup> 4	173 <sup>h</sup> 1	170 <sup>h</sup> 4	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 2	169 <sup>h</sup> 4	169 <sup>h</sup> 7	169 <sup>h</sup> 5	169 <sup>h</sup> 5
171 <sup>h</sup> 4	171 <sup>h</sup> 9	172 <sup>h</sup> 9	175 <sup>h</sup> 4	173 <sup>h</sup> 1	170 <sup>h</sup> 6	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 2	169 <sup>h</sup> 1	169 <sup>h</sup> 7	168 <sup>h</sup> 9	169 <sup>h</sup> 5
171 <sup>h</sup> 4	172 <sup>h</sup> 5	173 <sup>h</sup> 3	174 <sup>h</sup> 8	173 <sup>h</sup> 4	170 <sup>h</sup> 6	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 2	169 <sup>h</sup> 7	169 <sup>h</sup> 9	168 <sup>h</sup> 9	169 <sup>h</sup> 5
171 <sup>h</sup> 4	172 <sup>h</sup> 5	173 <sup>h</sup> 3	174 <sup>h</sup> 8	173 <sup>h</sup> 4	170 <sup>h</sup> 6	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 2	169 <sup>h</sup> 7	169 <sup>h</sup> 9	168 <sup>h</sup> 9	170 <sup>h</sup> 1
171 <sup>h</sup> 3	172 <sup>h</sup> 5	173 <sup>h</sup> 3	174 <sup>h</sup> 8	171 <sup>h</sup> 9	170 <sup>h</sup> 4	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 2	169 <sup>h</sup> 7	169 <sup>h</sup> 5	168 <sup>h</sup> 9	170 <sup>h</sup> 1
171 <sup>h</sup> 3	172 <sup>h</sup> 5	173 <sup>h</sup> 5	174 <sup>h</sup> 5	171 <sup>h</sup> 9	170 <sup>h</sup> 6	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 2	169 <sup>h</sup> 7	169 <sup>h</sup> 5	168 <sup>h</sup> 9	169 <sup>h</sup> 6
171 <sup>h</sup> 3	172 <sup>h</sup> 5	175 <sup>h</sup> 0	174 <sup>h</sup> 5	171 <sup>h</sup> 9	169 <sup>h</sup> 9	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 3	170 <sup>h</sup> 2	169 <sup>h</sup> 5	168 <sup>h</sup> 9	169 <sup>h</sup> 6
171 <sup>h</sup> 3	172 <sup>h</sup> 5	175 <sup>h</sup> 4	174 <sup>h</sup> 5	172 <sup>h</sup> 1	169 <sup>h</sup> 9	170 <sup>h</sup> 1	169 <sup>h</sup> 8	169 <sup>h</sup> 5	170 <sup>h</sup> 2	169 <sup>h</sup> 5	169 <sup>h</sup> 6	169 <sup>h</sup> 6
49 <sup>h</sup> 5	49 <sup>h</sup> 5	49 <sup>h</sup> 3	48 <sup>h</sup> 5	48 <sup>h</sup> 6	49 <sup>h</sup> 8	50 <sup>h</sup> 2	50 <sup>h</sup> 4	50 <sup>h</sup> 7	51 <sup>h</sup> 0	51 <sup>h</sup> 4	51 <sup>h</sup> 8	52 <sup>h</sup> 3

and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32 <sup>o</sup> .	Thermometers.		Wind.		Weather.
D.	H.	M.		Dry.	Wet.	Direction.	Force.	
19	22	0	29 <sup>h</sup> 980	26 <sup>h</sup> 3	24 <sup>h</sup> 1	—	—	Calm.
	23	0	29 <sup>h</sup> 966	25 <sup>h</sup> 0	23 <sup>h</sup> 6	—	—	Calm.
20	0	0	29 <sup>h</sup> 976	27 <sup>h</sup> 6	25 <sup>h</sup> 4	—	—	Calm.
	1	0	29 <sup>h</sup> 974	31 <sup>h</sup> 8	28 <sup>h</sup> 2	—	—	Calm.
	2	0	29 <sup>h</sup> 973	39 <sup>h</sup> 1	31 <sup>h</sup> 9			

May 26th and 27th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0°721.						DECLINATION.					
		10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	111°4	113°4	114°4	114°0	112°4	112°7	118°4	114°2	115°2	117°8	122°3	122°3
5	0	111°5	113°4	114°4	113°8	112°4	112°4	120°3	111°2	112°4	120°2	125°5	125°5
10	0	111°6	113°4	114°4	114°5	112°4	112°6	120°3	111°2	111°2	122°0	128°7	128°7
15	0	112°2	113°4	114°4	111°6	112°4	112°6	119°6	111°4	107°8	121°8	130°6	130°6
20	0	112°4	113°5	114°4	114°4	112°4	113°4	119°4	111°4	107°2	121°4	129°4	129°4
25	0	112°5	113°5	114°0	114°4	112°4	114°4	118°4	111°4	109°8	120°6	133°5	133°5
30	0	112°8	113°4	114°2	111°2	112°4	113°4	118°0	113°4	112°2	122°5	130°3	130°3
35	0	112°9	113°4	114°4	113°5	112°6	113°3	116°2	111°5	113°2	124°9	127°5	127°5
40	0	113°2	113°5	114°4	113°4	112°2	112°6	115°4	111°4	113°4	126°5	127°4	127°4
45	0	113°2	113°6	114°4	113°2	112°4	111°4	115°2	112°0	113°2	126°2	125°4	125°4
50	0	113°3	113°6	114°4	112°4	113°4	115°6	115°4	111°4	113°2	125°5	126°4	126°4
55	0	113°4	114°3	114°0	112°4	112°4	116°4	114°3	112°6	115°3	122°6	127°6	127°6

M.		One Scale Division = 0°00087 parts of the H. F.										HORIZONTAL FORCE.	
		621°0	619°0	619°0	616°0	617°2	619°0	607°0	613°2	634°5	597°8	585°0	585°0
2	0	621°0	619°0	619°0	616°0	617°2	619°0	607°0	613°2	634°5	597°8	585°0	585°0
7	0	621°0	620°0	618°8	615°0	619°0	619°0	607°2	614°0	629°3	598°2	587°0	587°0
12	0	619°0	620°5	618°8	615°0	619°5	620°2	608°0	615°0	626°8	598°4	585°0	585°0
17	0	620°0	620°5	618°3	615°0	619°0	620°9	607°2	614°8	625°4	600°0	580°0	580°0
22	0	619°0	619°5	618°0	614°0	617°5	621°0	607°2	617°6	617°2	598°2	582°6	582°6
27	0	619°0	618°5	619°0	614°0	616°0	621°0	607°0	619°0	612°8	597°4	577°0	577°0
32	0	618°5	618°8	619°5	614°0	616°0	623°8	607°2	619°2	609°5	596°3	578°8	578°8
37	0	618°0	619°0	620°0	614°0	618°0	621°8	607°0	620°4	605°4	594°8	582°4	582°4
42	0	618°0	618°4	620°0	615°0	619°8	619°9	608°2	620°7	601°2	596°0	590°0	590°0
47	0	617°0	619°0	620°0	616°0	623°0	617°8	610°2	632°2	597°5	593°0	594°0	594°0
52	0	617°0	618°0	619°0	616°0	622°0	614°0	612°4	632°0	597°2	591°4	599°2	599°2
57	0	616°5	619°0	617°0	617°0	620°0	611°0	612°2	632°4	598°2	587°0	602°6	602°6

Thermometer	70°4	70°3	70°3	69°0	68°1	67°8	67°2	66°6	65°7	65°2	64°5
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M.		One Scale Division = 0°00063 parts of the V. F.										VERTICAL FORCE.	
		138°0	138°2	138°0	138°0	135°3	133°7	137°6	139°3	122°4	119°0	117°4	117°4
3	0	138°0	138°2	138°0	138°0	135°3	133°7	137°6	139°3	122°4	119°0	117°4	117°4
8	0	138°0	138°2	137°8	138°0	135°3	133°7	138°0	139°3	121°8	119°0	116°8	116°8
13	0	138°2	138°2	137°8	138°0	135°3	133°7	138°0	139°6	121°8	119°2	117°8	117°8
18	0	138°2	138°2	137°8	138°0	134°3	133°7	138°0	139°6	121°8	119°0	119°5	119°5
23	0	138°0	138°0	137°8	138°0	134°3	133°7	138°0	139°4	121°6	118°9	120°6	120°6
28	0	138°0	138°0	137°8	138°0	134°0	134°9	137°4	138°7	121°2	118°8	118°4	118°4
33	0	138°0	138°0	137°8	136°9	134°0	135°5	137°4	139°5	121°0	118°4	119°8	119°8
38	0	138°2	138°0	138°0	136°9	134°0	135°5	137°4	139°5	120°0	118°0	123°3	123°3
43	0	138°2	138°0	138°0	136°9	134°0	135°5	137°4	139°5	120°0	118°0	127°4	127°4
48	0	138°2	138°0	138°0	135°9	134°0	136°4	138°0	139°8	119°4	117°8	129°6	129°6
53	0	138°2	138°0	138°0	135°9	134°0	136°4	138°0	129°4	119°4	117°8	133°0	133°0
58	0	138°2	138°0	138°0	135°9	133°5	136°8	138°3	129°4	119°5	118°2	134°3	134°3

Thermometer	67°2	67°6	67°7	67°5	68°5	69°0	68°5	67°4	67°0	66°4	65°5
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.			Barometer at 32°.	Thermometers.		Wind.		Weather.
				Dry.	Wet.	Direction.	Force.	
D.	H.	M.	In.	°	°			
26	10	0	29°60	63°9	53°0	N.	Moderate.	Mostly clear; auroral light in N. from 18h to 24h.
	11	0	29°674	64°6	53°6	N.	Light.	Mostly clear.
	12	0	29°678	64°4	53°0	N. by E.	Light.	Mostly clear.
	13	0	29°694	60°3	51°3	N. by W.	Light.	Mostly clear.
	14	0	29°706	55°0	48°5	N. by W.	Very light.	Mostly clear.
	15	0	29°725	53°4	46°6	N.N.W.	Very light.	Mostly clear.
	16	0	29°737	52°0	45°5	N.N.W.	Very light.	Clear.
	17	0	29°757	49°9	44°6	N. by W.	Very light.	Clear.
	18	0	29°767	49°1	44°3	N. by W.	Very light.	Clear.
	19	0	29°768	48°7	44°1	N.N.W.	Very light.	Clear.
	20	0	29°782	47°1	43°3	N.N.W.	Very light.	Clear.
	21	0	29°782	47°8	43°2	N. by E.	Very light.	Clear.

\* At 274 10h, Thermometer of H. F., 68°°5; of V. F., 67°°0.

MAGNETICAL OBSERVATIONS.

May 26th and 27th.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
117 <sup>h</sup> 8	122 <sup>h</sup> 3	121 <sup>h</sup> 9	125 <sup>h</sup> 8	129 <sup>h</sup> 2	129 <sup>h</sup> 0	111 <sup>h</sup> 6	115 <sup>h</sup> 2	109 <sup>h</sup> 9	109 <sup>h</sup> 2	107 <sup>h</sup> 5	105 <sup>h</sup> 5	103 <sup>h</sup> 2	103 <sup>h</sup> 2	106 <sup>h</sup> 8
120 <sup>h</sup> 2	125 <sup>h</sup> 5	122 <sup>h</sup> 8	125 <sup>h</sup> 8	130 <sup>h</sup> 0	130 <sup>h</sup> 2	111 <sup>h</sup> 0	115 <sup>h</sup> 4	109 <sup>h</sup> 4	108 <sup>h</sup> 4	107 <sup>h</sup> 1	105 <sup>h</sup> 4	103 <sup>h</sup> 3	103 <sup>h</sup> 3	106 <sup>h</sup> 7
122 <sup>h</sup> 0	128 <sup>h</sup> 7	129 <sup>h</sup> 5	126 <sup>h</sup> 0	130 <sup>h</sup> 1	125 <sup>h</sup> 9	111 <sup>h</sup> 4	115 <sup>h</sup> 4	109 <sup>h</sup> 2	109 <sup>h</sup> 8	108 <sup>h</sup> 8	106 <sup>h</sup> 5	103 <sup>h</sup> 7	103 <sup>h</sup> 7	107 <sup>h</sup> 2
121 <sup>h</sup> 8	130 <sup>h</sup> 6	131 <sup>h</sup> 0	121 <sup>h</sup> 5	131 <sup>h</sup> 0	129 <sup>h</sup> 1	110 <sup>h</sup> 4	116 <sup>h</sup> 1	111 <sup>h</sup> 5	109 <sup>h</sup> 6	107 <sup>h</sup> 6	105 <sup>h</sup> 4	103 <sup>h</sup> 4	103 <sup>h</sup> 4	107 <sup>h</sup> 0
121 <sup>h</sup> 4	129 <sup>h</sup> 4	131 <sup>h</sup> 2	120 <sup>h</sup> 6	121 <sup>h</sup> 2	130 <sup>h</sup> 0	128 <sup>h</sup> 5	110 <sup>h</sup> 2	111 <sup>h</sup> 2	113 <sup>h</sup> 5	111 <sup>h</sup> 4	108 <sup>h</sup> 2	105 <sup>h</sup> 2	103 <sup>h</sup> 4	107 <sup>h</sup> 2
120 <sup>h</sup> 6	133 <sup>h</sup> 5	128 <sup>h</sup> 4	119 <sup>h</sup> 4	121 <sup>h</sup> 8	129 <sup>h</sup> 1	123 <sup>h</sup> 0	111 <sup>h</sup> 2	111 <sup>h</sup> 5	113 <sup>h</sup> 5	111 <sup>h</sup> 8	107 <sup>h</sup> 2	103 <sup>h</sup> 3	105 <sup>h</sup> 4	108 <sup>h</sup> 0
122 <sup>h</sup> 5	130 <sup>h</sup> 3	126 <sup>h</sup> 5	120 <sup>h</sup> 1	123 <sup>h</sup> 1	128 <sup>h</sup> 2	117 <sup>h</sup> 6	115 <sup>h</sup> 4	111 <sup>h</sup> 4	111 <sup>h</sup> 3	112 <sup>h</sup> 2	108 <sup>h</sup> 2	102 <sup>h</sup> 2	106 <sup>h</sup> 1	107 <sup>h</sup> 5
121 <sup>h</sup> 9	127 <sup>h</sup> 5	127 <sup>h</sup> 3	120 <sup>h</sup> 4	125 <sup>h</sup> 1	128 <sup>h</sup> 1	118 <sup>h</sup> 2	117 <sup>h</sup> 4	113 <sup>h</sup> 4	107 <sup>h</sup> 0	111 <sup>h</sup> 1	107 <sup>h</sup> 4	102 <sup>h</sup> 2	106 <sup>h</sup> 5	108 <sup>h</sup> 4
126 <sup>h</sup> 5	127 <sup>h</sup> 1	126 <sup>h</sup> 3	121 <sup>h</sup> 2	126 <sup>h</sup> 4	127 <sup>h</sup> 7	117 <sup>h</sup> 1	117 <sup>h</sup> 4	113 <sup>h</sup> 4	106 <sup>h</sup> 4	109 <sup>h</sup> 3	105 <sup>h</sup> 0	103 <sup>h</sup> 0	107 <sup>h</sup> 0	108 <sup>h</sup> 7
126 <sup>h</sup> 2	125 <sup>h</sup> 4	123 <sup>h</sup> 3	123 <sup>h</sup> 4	127 <sup>h</sup> 1	127 <sup>h</sup> 8	117 <sup>h</sup> 4	116 <sup>h</sup> 6	114 <sup>h</sup> 5	107 <sup>h</sup> 4	108 <sup>h</sup> 4	105 <sup>h</sup> 8	103 <sup>h</sup> 1	107 <sup>h</sup> 9	109 <sup>h</sup> 0
125 <sup>h</sup> 5	126 <sup>h</sup> 1	125 <sup>h</sup> 2	123 <sup>h</sup> 6	128 <sup>h</sup> 2	127 <sup>h</sup> 6	115 <sup>h</sup> 6	115 <sup>h</sup> 8	115 <sup>h</sup> 4	105 <sup>h</sup> 2	103 <sup>h</sup> 8	105 <sup>h</sup> 3	102 <sup>h</sup> 1	107 <sup>h</sup> 0	103 <sup>h</sup> 8
122 <sup>h</sup> 6	127 <sup>h</sup> 6	122 <sup>h</sup> 6	121 <sup>h</sup> 2	129 <sup>h</sup> 2	123 <sup>h</sup> 5	114 <sup>h</sup> 4	115 <sup>h</sup> 1	114 <sup>h</sup> 2	105 <sup>h</sup> 4	105 <sup>h</sup> 1	105 <sup>h</sup> 3	102 <sup>h</sup> 1	106 <sup>h</sup> 8	109 <sup>h</sup> 4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

603 <sup>h</sup> 7	616 <sup>h</sup> 8	616 <sup>h</sup> 0	617 <sup>h</sup> 0	608 <sup>h</sup> 0	588 <sup>h</sup> 5	597 <sup>h</sup> 0	588 <sup>h</sup> 0	598 <sup>h</sup> 5	602 <sup>h</sup> 0	616 <sup>h</sup> 9	611 <sup>h</sup> 0	627 <sup>h</sup> 2
603 <sup>h</sup> 4	615 <sup>h</sup> 6	615 <sup>h</sup> 0	616 <sup>h</sup> 0	611 <sup>h</sup> 0	597 <sup>h</sup> 0	595 <sup>h</sup> 0	587 <sup>h</sup> 2	602 <sup>h</sup> 2	598 <sup>h</sup> 2	617 <sup>h</sup> 0	615 <sup>h</sup> 0	630 <sup>h</sup> 0
601 <sup>h</sup> 0	617 <sup>h</sup> 0	615 <sup>h</sup> 0	615 <sup>h</sup> 0	601 <sup>h</sup> 2	600 <sup>h</sup> 0	593 <sup>h</sup> 0	584 <sup>h</sup> 0	601 <sup>h</sup> 2	605 <sup>h</sup> 8	622 <sup>h</sup> 5	616 <sup>h</sup> 0	636 <sup>h</sup> 0
601 <sup>h</sup> 1	612 <sup>h</sup> 0	616 <sup>h</sup> 0	615 <sup>h</sup> 0	600 <sup>h</sup> 5	599 <sup>h</sup> 5	595 <sup>h</sup> 2	588 <sup>h</sup> 0	601 <sup>h</sup> 6	612 <sup>h</sup> 6	622 <sup>h</sup> 1	616 <sup>h</sup> 5	635 <sup>h</sup> 0
604 <sup>h</sup> 0	615 <sup>h</sup> 0	616 <sup>h</sup> 2	611 <sup>h</sup> 6	603 <sup>h</sup> 5	600 <sup>h</sup> 0	598 <sup>h</sup> 0	587 <sup>h</sup> 2	605 <sup>h</sup> 5	612 <sup>h</sup> 5	623 <sup>h</sup> 8	616 <sup>h</sup> 0	635 <sup>h</sup> 0
601 <sup>h</sup> 2	614 <sup>h</sup> 0	616 <sup>h</sup> 0	610 <sup>h</sup> 0	598 <sup>h</sup> 5	597 <sup>h</sup> 5	591 <sup>h</sup> 0	588 <sup>h</sup> 5	602 <sup>h</sup> 2	613 <sup>h</sup> 1	622 <sup>h</sup> 4	624 <sup>h</sup> 0	630 <sup>h</sup> 0
606 <sup>h</sup> 0	611 <sup>h</sup> 1	614 <sup>h</sup> 0	613 <sup>h</sup> 0	599 <sup>h</sup> 0	594 <sup>h</sup> 0	591 <sup>h</sup> 0	590 <sup>h</sup> 0	601 <sup>h</sup> 2	612 <sup>h</sup> 8	613 <sup>h</sup> 1	626 <sup>h</sup> 0	622 <sup>h</sup> 0
609 <sup>h</sup> 0	615 <sup>h</sup> 0	613 <sup>h</sup> 8	610 <sup>h</sup> 0	591 <sup>h</sup> 0	591 <sup>h</sup> 5	596 <sup>h</sup> 0	594 <sup>h</sup> 0	604 <sup>h</sup> 0	610 <sup>h</sup> 0	612 <sup>h</sup> 0	630 <sup>h</sup> 0	628 <sup>h</sup> 8
609 <sup>h</sup> 0	615 <sup>h</sup> 0	620 <sup>h</sup> 0	609 <sup>h</sup> 0	588 <sup>h</sup> 0	593 <sup>h</sup> 5	591 <sup>h</sup> 0	597 <sup>h</sup> 0	598 <sup>h</sup> 8	617 <sup>h</sup> 2	611 <sup>h</sup> 8	626 <sup>h</sup> 0	632 <sup>h</sup> 0
611 <sup>h</sup> 0	618 <sup>h</sup> 2	620 <sup>h</sup> 0	606 <sup>h</sup> 2	585 <sup>h</sup> 0	591 <sup>h</sup> 5	588 <sup>h</sup> 2	603 <sup>h</sup> 1	600 <sup>h</sup> 2	616 <sup>h</sup> 7	617 <sup>h</sup> 0	621 <sup>h</sup> 0	631 <sup>h</sup> 0
615 <sup>h</sup> 0	620 <sup>h</sup> 4	620 <sup>h</sup> 0	605 <sup>h</sup> 8	588 <sup>h</sup> 5	591 <sup>h</sup> 0	585 <sup>h</sup> 0	603 <sup>h</sup> 2	599 <sup>h</sup> 0	618 <sup>h</sup> 0	609 <sup>h</sup> 0	621 <sup>h</sup> 0	636 <sup>h</sup> 0
618 <sup>h</sup> 0	620 <sup>h</sup> 8	618 <sup>h</sup> 0	607 <sup>h</sup> 0	588 <sup>h</sup> 5	591 <sup>h</sup> 0	586 <sup>h</sup> 0	601 <sup>h</sup> 8	601 <sup>h</sup> 2	616 <sup>h</sup> 0	608 <sup>h</sup> 8	625 <sup>h</sup> 0	634 <sup>h</sup> 0
63 <sup>h</sup> 9	63 <sup>h</sup> 2	63 <sup>h</sup> 0	62 <sup>h</sup> 2	62 <sup>h</sup> 8	63 <sup>h</sup> 5	61 <sup>h</sup> 2	65 <sup>h</sup> 1	65 <sup>h</sup> 8	66 <sup>h</sup> 1	66 <sup>h</sup> 5	67 <sup>h</sup> 0	68 <sup>h</sup> 0 <sup>a</sup>

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

133 <sup>h</sup> 5	143 <sup>h</sup> 7	143 <sup>h</sup> 1	142 <sup>h</sup> 8	140 <sup>h</sup> 2	137 <sup>h</sup> 1	138 <sup>h</sup> 0	143 <sup>h</sup> 1	143 <sup>h</sup> 0	142 <sup>h</sup> 7	147 <sup>h</sup> 2	149 <sup>h</sup> 5	148 <sup>h</sup> 2
132 <sup>h</sup> 4	143 <sup>h</sup> 4	143 <sup>h</sup> 1	142 <sup>h</sup> 8	141 <sup>h</sup> 2	137 <sup>h</sup> 1	138 <sup>h</sup> 3	142 <sup>h</sup> 1	141 <sup>h</sup> 7	142 <sup>h</sup> 2	147 <sup>h</sup> 2	149 <sup>h</sup> 2	148 <sup>h</sup> 2
132 <sup>h</sup> 1	143 <sup>h</sup> 4	143 <sup>h</sup> 2	142 <sup>h</sup> 8	140 <sup>h</sup> 2	137 <sup>h</sup> 1	138 <sup>h</sup> 3	140 <sup>h</sup> 1	141 <sup>h</sup> 7	143 <sup>h</sup> 1	148 <sup>h</sup> 5	149 <sup>h</sup> 2	148 <sup>h</sup> 2
133 <sup>h</sup> 7	143 <sup>h</sup> 4	145 <sup>h</sup> 5	142 <sup>h</sup> 8	140 <sup>h</sup> 2	137 <sup>h</sup> 1	139 <sup>h</sup> 3	139 <sup>h</sup> 1	141 <sup>h</sup> 7	143 <sup>h</sup> 7	148 <sup>h</sup> 5	149 <sup>h</sup> 2	148 <sup>h</sup> 2
131 <sup>h</sup> 7	143 <sup>h</sup> 4	145 <sup>h</sup> 5	142 <sup>h</sup> 8	140 <sup>h</sup> 2	137 <sup>h</sup> 1	140 <sup>h</sup> 0	140 <sup>h</sup> 2	142 <sup>h</sup> 3	141 <sup>h</sup> 6	149 <sup>h</sup> 3	149 <sup>h</sup> 7	148 <sup>h</sup> 4
136 <sup>h</sup> 2	143 <sup>h</sup> 4	145 <sup>h</sup> 7	142 <sup>h</sup> 8	139 <sup>h</sup> 2	136 <sup>h</sup> 8	139 <sup>h</sup> 3	140 <sup>h</sup> 1	142 <sup>h</sup> 3	145 <sup>h</sup> 2	149 <sup>h</sup> 3	149 <sup>h</sup> 9	147 <sup>h</sup> 3
137 <sup>h</sup> 6	143 <sup>h</sup> 4	145 <sup>h</sup> 7	142 <sup>h</sup> 8	136 <sup>h</sup> 1	136 <sup>h</sup> 8	139 <sup>h</sup> 5	140 <sup>h</sup> 9	141 <sup>h</sup> 5	145 <sup>h</sup> 2	148 <sup>h</sup> 7	149 <sup>h</sup> 9	147 <sup>h</sup> 1
138 <sup>h</sup> 2	143 <sup>h</sup> 6	145 <sup>h</sup> 7	143 <sup>h</sup> 5	136 <sup>h</sup> 1	136 <sup>h</sup> 8	139 <sup>h</sup> 3	140 <sup>h</sup> 9	141 <sup>h</sup> 1	145 <sup>h</sup> 2	148 <sup>h</sup> 7	149 <sup>h</sup> 9	147 <sup>h</sup> 1
139 <sup>h</sup> 0	143 <sup>h</sup> 6	145 <sup>h</sup> 9	143 <sup>h</sup> 5	136 <sup>h</sup> 5	136 <sup>h</sup> 8	139 <sup>h</sup> 3	140 <sup>h</sup> 9	140 <sup>h</sup> 9	146 <sup>h</sup> 0	148 <sup>h</sup> 8	149 <sup>h</sup> 9	146 <sup>h</sup> 0
140 <sup>h</sup> 8	143 <sup>h</sup> 1	14 <sup>h</sup> 9	143 <sup>h</sup> 5	136 <sup>h</sup> 5	137 <sup>h</sup> 8	138 <sup>h</sup> 8	141 <sup>h</sup> 1	141 <sup>h</sup> 6	146 <sup>h</sup> 0	148 <sup>h</sup> 8	148 <sup>h</sup> 2	146 <sup>h</sup> 9
141 <sup>h</sup> 5	143 <sup>h</sup> 1	14 <sup>h</sup> 9	143 <sup>h</sup> 5	137 <sup>h</sup> 1	136 <sup>h</sup> 8	138 <sup>h</sup> 3	141 <sup>h</sup> 1	142 <sup>h</sup> 2	146 <sup>h</sup> 0	148 <sup>h</sup> 8	148 <sup>h</sup> 2	146 <sup>h</sup> 9
143 <sup>h</sup> 0	143 <sup>h</sup> 1	14 <sup>h</sup> 9	143 <sup>h</sup> 5	137 <sup>h</sup> 1	137 <sup>h</sup> 1	139 <sup>h</sup> 9	141 <sup>h</sup> 2	142 <sup>h</sup> 2	146 <sup>h</sup> 0	148 <sup>h</sup> 4	148 <sup>h</sup> 2	146 <sup>h</sup> 9
64 <sup>h</sup> 6	61 <sup>h</sup> 0	63 <sup>h</sup> 5	63 <sup>h</sup> 5	63 <sup>h</sup> 5	63 <sup>h</sup> 6	61 <sup>h</sup> 1	61 <sup>h</sup> 5	61 <sup>h</sup> 9	65 <sup>h</sup> 3	65 <sup>h</sup> 5	65 <sup>h</sup> 5	66 <sup>h</sup> 5 <sup>a</sup>

and increasing Horizontal and vertical Force.

METEOROLOGICAL OBSERVATIONS.

Mean Göttingen Time.	Barometer at 32°.	Thermom. t.rs.			Wind.		Weather.
		Dry.	Wet.	o	Direction.	Force.	
D. H. M.	In.	o	o				
26 22 0	29 <sup>h</sup> 795	47 <sup>h</sup> 0	42 <sup>h</sup> 8	N. by E.	Very light.	Clear.	
23 0 0	29 <sup>h</sup> 792	47 <sup>h</sup> 0	42 <sup>h</sup> 9	N.	Very light.	Clear.	
27 0 0	29 <sup>h</sup> 829	55 <sup>h</sup> 8	47 <sup>h</sup> 1	—	—	Calm.	
1 0 0	29 <sup>h</sup> 850	52 <sup>h</sup> 8	48 <sup>h</sup> 7	—	—	Calm.	
2 0 0	29 <sup>h</sup> 850	58 <sup>h</sup> 2	52 <sup>h</sup> 8	—	—	Calm.	
3 0 0	29 <sup>h</sup> 857	61 <sup>h</sup> 5	55 <sup>h</sup> 1	—	—	Calm.	
4 0 0	29 <sup>h</sup> 831	62 <sup>h</sup> 3	55 <sup>h</sup> 8	—	—	Calm.	
5 0 0	29 <sup>h</sup> 822	62 <sup>h</sup> 4	56 <sup>h</sup> 5	S.S.E.	Very light.	Clear.	
6 0 0	29 <sup>h</sup> 822	62 <sup>h</sup> 2	56 <sup>h</sup> 3	S. by W.	Very light.	Clear.	
7 0 0	29 <sup>h</sup> 795	64 <sup>h</sup> 9	57 <sup>h</sup> 6	S. by E.	Very light.	Clear.	
8 0 0	29 <sup>h</sup> 773	66 <sup>h</sup> 3	58 <sup>h</sup> 0	S. by E.	Very light.	Clear.	
9 0 0	29 <sup>h</sup> 757	66 <sup>h</sup> 0	56 <sup>h</sup> 2	E. by S.	Very light.	Clear.	

June 21st and 22nd.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.	Angular Value of one Scale Division = 0° 721.											DECLINATION.	
	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.		
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0 0	110° 2	109° 2	113° 4	113° 2	111° 4	116° 0	116° 0	117° 4	121° 4	122° 4	123° 5	123° 5	
5 0	112° 2	112° 6	113° 4	113° 1	111° 8	115° 5	119° 1	117° 6	122° 4	121° 6	124° 6	124° 6	
10 0	117° 4	112° 5	111° 0	113° 6	110° 4	116° 0	121° 6	118° 4	124° 9	123° 0	124° 4	124° 4	
15 0	117° 4	112° 4	113° 8	115° 4	112° 4	116° 7	121° 4	118° 6	126° 5	123° 4	119° 9	119° 9	
20 0	115° 5	113° 5	114° 4	115° 7	113° 2	117° 0	120° 2	117° 6	124° 0	126° 4	119° 3	119° 3	
25 0	111° 4	113° 5	114° 0	116° 0	113° 5	114° 2	119° 3	117° 0	118° 6	127° 4	118° 4	118° 4	
30 0	113° 2	113° 2	114° 0	116° 0	112° 6	114° 4	117° 6	118° 4	118° 4	139° 9	118° 2	118° 2	
35 0	113° 0	113° 4	114° 4	112° 4	112° 4	116° 0	117° 4	119° 4	121° 4	130° 4	119° 5	119° 5	
40 0	110° 8	113° 6	115° 0	111° 5	112° 4	117° 8	116° 6	119° 6	125° 5	131° 0	118° 8	118° 8	
45 0	109° 4	113° 4	115° 4	111° 4	112° 6	118° 1	117° 4	118° 4	127° 0	135° 2	119° 4	119° 4	
50 0	109° 4	113° 4	115° 0	112° 4	113° 3	118° 0	117° 0	118° 5	126° 4	134° 2	119° 2	119° 2	
55 0	109° 4	113° 6	113° 8	112° 0	115° 4	116° 7	117° 4	119° 2	122° 2	131° 7	120° 1	120° 1	

M. S.	One Scale Division = 0° 00087 parts of the H. F.											HORIZONTAL FORCE.
	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
2 0	625° 4	624° 2	601° 2	613° 0	607° 0	602° 2	602° 0	599° 4	602° 0	601° 2	609° 0	609° 0
7 0	614° 4	623° 2	600° 2	617° 0	612° 0	603° 2	602° 0	601° 0	604° 5	607° 5	603° 0	603° 0
12 0	619° 3	614° 2	599° 0	616° 0	610° 0	604° 0	600° 0	601° 0	603° 5	608° 0	600° 0	600° 0
17 0	616° 2	599° 2	597° 0	618° 0	609° 2	607° 0	600° 0	600° 5	602° 0	606° 0	596° 0	596° 0
22 0	607° 2	598° 0	605° 0	618° 2	610° 0	607° 4	599° 0	599° 0	602° 8	600° 0	594° 0	594° 0
27 0	603° 0	597° 0	610° 5	611° 5	610° 2	609° 0	599° 0	599° 0	604° 0	605° 5	590° 0	590° 0
32 0	600° 2	593° 2	611° 0	613° 0	610° 2	608° 8	600° 0	599° 0	602° 0	608° 7	592° 0	592° 0
37 0	600° 0	596° 4	616° 0	618° 2	606° 0	605° 0	599° 0	600° 0	602° 0	602° 0	597° 1	597° 1
42 0	602° 8	597° 4	615° 0	611° 8	605° 8	603° 2	599° 0	601° 2	600° 5	600° 0	599° 5	599° 5
47 0	608° 5	595° 0	618° 2	613° 0	606° 4	607° 0	599° 0	601° 0	601° 0	599° 0	601° 0	601° 0
52 0	614° 0	601° 2	621° 2	611° 0	602° 0	607° 2	599° 0	603° 0	603° 0	599° 0	601° 0	601° 0
57 0	621° 2	602° 2	613° 4	611° 0	602° 0	604° 4	601° 0	600° 5	603° 0	604° 0	602° 0	602° 0

Thermometer	71° 8	72° 4	72° 6	72° 2	71° 5	71° 3	70° 4	69° 6	69° 5	69° 8	68° 6
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M. S.	One Scale Division = 0° 00063 parts of the V. F.											VERTICAL FORCE.
	10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
3 0	138° 1	137° 2	130° 7	132° 1	133° 2	131° 5	127° 4	127° 9	119° 8	121° 0	123° 6	123° 6
8 0	138° 1	135° 9	130° 7	132° 7	133° 7	131° 5	127° 7	127° 9	119° 8	121° 0	121° 0	121° 0
13 0	138° 1	133° 4	129° 4	132° 7	133° 7	131° 5	127° 8	127° 9	119° 8	121° 0	121° 2	121° 2
18 0	137° 1	133° 4	129° 4	132° 7	133° 7	131° 5	127° 8	127° 7	119° 8	122° 7	121° 2	121° 2
23 0	135° 1	133° 1	129° 0	132° 7	133° 7	131° 1	128° 6	127° 7	119° 8	122° 7	122° 6	122° 6
28 0	133° 9	133° 5	132° 1	132° 7	133° 7	131° 1	128° 6	127° 9	123° 0	121° 5	120° 5	120° 5
33 0	133° 9	133° 1	132° 1	132° 7	133° 7	131° 1	128° 9	127° 9	123° 3	119° 6	121° 2	121° 2
38 0	133° 6	133° 1	132° 1	133° 0	133° 2	131° 3	128° 9	127° 9	125° 0	119° 6	121° 3	121° 3
43 0	133° 2	133° 1	132° 1	133° 0	133° 2	131° 3	129° 6	127° 8	125° 0	119° 0	121° 3	121° 3
48 0	133° 8	133° 1	132° 7	133° 0	132° 9	131° 3	129° 6	127° 8	125° 0	118° 5	121° 2	121° 2
53 0	133° 8	133° 1	132° 7	133° 0	132° 9	131° 4	129° 6	127° 8	125° 0	119° 0	119° 0	119° 0
58 0	136° 3	133° 1	131° 7	133° 2	132° 9	131° 4	129° 6	127° 8	121° 0	121° 5	118° 2	118° 2

Thermometer	70° 6	71° 3	71° 5	71° 3	70° 5	70° 8	70° 8	70° 5	70° 5	70° 5	70° 0
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Increasing Numbers denote decreasing Westerly Declination.

METEOROLOGICAL OBSERVATIONS.											
Mean Göttingen Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.					
		Dry.	Wet.	Direction.	Force.						
D. H. M.	In.										
21 10 0	29° 400	71° 5	61° 4	W.N.W.	Very light.	Mostly clouded; cir-cum. and cum-strat., a few clear spots.					
11 0	29° 401	70° 6	61° 1	W.N.W.	Very light.	Mostly clouded; a few clear spaces.					
12 0	29° 423	69° 8	58° 9	W.N.W.	Light.	Mostly clouded; a few clear spaces.					
13 0	29° 457	67° 3	58° 2	W.N.W.	Light.	Clouded.					
14 0	29° 460	63° 1	55° 6	W.N.W.	Very light.	Clouded.					
15 0	29° 470	62° 5	55° 0	—	—	Clouded.					
16 0	29° 463	57° 3	53° 6	—	—	Clouded.					
17 0	29° 442	55° 2	52° 5	—	—	Clouded.					
18 0	29° 449	52° 8	50° 8	—	—	Clouded.					
19 0	29° 445	53° 2	50° 8	—	—	Clouded.					
20 0	29° 475	53° 4	51° 0	—	—	Clouded.					
21 0	29° 482	52° 6	50° 8	—	—	Clouded.					

\* At 224 109, Thermometer of H. F., 72° 3'; of V. F., 71° 0'.

MAGNETICAL OBSERVATIONS.

June 21st and 22nd.

DECLINATION.

Angular Value of one Scale Division = 0° 721.

21 <sup>h</sup> .				22 <sup>h</sup> .				23 <sup>h</sup> .				0 <sup>h</sup> .				1 <sup>h</sup> .				2 <sup>h</sup> .				3 <sup>h</sup> .				4 <sup>h</sup> .				5 <sup>h</sup> .				6 <sup>h</sup> .				7 <sup>h</sup> .				8 <sup>h</sup> .				9 <sup>h</sup> .			
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.												
121°3	108°8	127°4	117°4	126°1	126°1	125°0	123°0	124°7	122°6	115°6	115°6	106°4	107°0	112°6	111°9	106°2	106°4	107°0	112°6	111°9	111°9	106°2	106°4	107°0	112°6	111°9	111°9	106°5	107°4	112°6	111°9	106°5	107°4	112°6	111°9	106°5	107°4	112°6	111°9												

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

609°9	609°0	603°2	605°5	588°8	601°5	598°0	580°0	585°0	587°0	602°1	601°0	613°0
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°61.

111°8	105°4	111°7	128°1	131°8	136°7	131°5	131°5	132°6	136°0	139°2	141°2	146°1
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and increasing Horizontal and Vertical Force.

METEOROLOGICAL OBSERVATIONS.

M. an Gotten- Time.	Barometer at 32°.	Thermometers.		Wind.		Weather.
		Dry.	Wet.	Direction.	Force.	
21 22 0	29° 196	52° 6	51° 0	—	—	Clouded.
23 0 0	29° 189	53° 7	52° 1	—	—	Clouded.
22 1 0	29° 498	57° 2	54° 8	—	—	Mostly clouded; cum-strat. and cir-strat.; faint auroral light.
2 0 0	29° 498	59° 7	56° 4	—	—	Mostly clouded; cum-strat. and cir-strat.
3 0 0	29° 510	67° 3	62° 2	—	—	Mostly clouded; cum-strat. and cir-strat.
4 0 0	29° 496	68° 9	61° 0	S.S.E.	Very light.	Mostly clouded.
5 0 0	29° 505	66° 5	62° 7	S.S.E.	Very light.	Mostly clouded.
6 0 0	29° 495	67° 7	62° 9	S.E. by E.	Very light.	Mostly clouded.
7 0 0	29° 492	69° 1	63° 7	E. by S.	Very light.	Clouded.
8 0 0	29° 493	71° 5	61° 9	E.	Very light.	Clouded.
9 0 0	29° 486	69° 9	63° 6	E.	Very light.	Clouded.
	29° 471	70° 1	63° 4	E.	Very light.	Clouded.

July 19th and 20th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale division = 0°721.										DECLINATION.	
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	109°4	112°5	115°8	114°4	114°5	118°2	127°5	120°6	117°6	114°4	112°4	
5	0	108°6	114°4	116°0	114°4	114°5	118°7	126°4	120°4	116°4	114°6	112°4	
10	0	108°8	113°4	116°4	113°6	115°0	118°4	125°4	121°0	115°4	114°4	112°4	
15	0	109°4	114°0	116°6	113°6	114°8	118°0	124°4	120°9	114°4	114°4	113°3	
20	0	109°8	114°2	116°4	113°4	115°2	118°2	122°6	120°4	113°8	114°5	113°4	
25	0	110°6	115°0	116°4	113°8	115°2	119°6	121°4	120°3	114°3	114°3	113°4	
30	0	111°8	115°4	116°2	113°8	115°4	124°8	120°0	120°4	114°9	113°4	113°2	
35	0	112°2	113°8	116°0	113°9	115°4	125°0	119°4	121°4	115°4	113°3	113°2	
40	0	112°2	113°4	115°4	114°5	115°4	125°0	119°6	121°6	115°4	112°2	112°7	
45	0	112°4	113°8	115°4	114°8	115°4	129°4	119°6	122°6	115°4	112°4	112°7	
50	0	112°4	115°2	115°4	115°0	115°0	129°0	119°4	122°2	114°0	112°4	112°5	
55	0	112°4	115°4	115°2	114°6	117°2	128°5	119°8	119°6	113°8	112°4	112°5	
m. s.		One Scale Division = '000087 parts of the H. F.										HORIZONTAL FORCE.	
2	0	601°8	609°8	591°2	596°8	598°0	600°0	599°0	591°0	590°2	602°0	598°4	
7	0	605°4	607°2	593°8	596°0	598°5	598°0	597°5	594°5	589°0	603°4	597°8	
12	0	609°2	602°2	593°8	596°2	599°0	597°8	596°0	595°0	591°0	601°8	597°0	
17	0	609°8	604°4	594°6	596°2	599°0	598°0	596°8	595°0	592°0	601°0	597°2	
22	0	607°8	603°2	597°8	597°8	599°2	598°2	596°5	593°5	593°0	600°0	598°0	
27	0	612°2	602°8	596°2	598°0	599°4	596°8	595°4	591°5	595°0	600°9	598°0	
32	0	613°5	604°4	595°0	598°0	599°4	598°0	593°3	588°5	596°2	600°0	597°5	
37	0	610°2	600°2	595°0	598°1	600°0	599°0	592°0	588°0	598°0	599°2	597°2	
42	0	609°8	597°6	593°2	593°8	600°4	599°2	591°8	587°0	597°5	599°0	597°4	
47	0	610°0	597°4	592°4	596°6	600°2	601°0	592°2	588°2	598°9	598°8	598°0	
52	0	610°2	598°4	594°2	596°0	596°8	601°2	592°6	589°0	600°0	599°0	598°5	
57	0	609°8	597°2	594°2	598°0	596°2	600°0	593°0	589°0	601°0	599°0	598°2	
Thermometer		76°2	76°2	76°2	75°5	75°2	74°4	73°9	74°0	73°8	73°7	73°5	
m. s.		One Scale Division = '000063 parts of the V. F.										VERTICAL FORCE.	
3	0	126°9	128°0	123°8	124°0	122°5	121°4	118°7	119°6	120°0	120°8	121°7	
5	0	126°9	128°0	123°6	124°4	122°5	121°7	117°7	119°6	120°0	120°8	121°7	
13	0	127°4	126°7	122°4	123°2	122°5	121°7	117°3	119°7	120°0	120°4	121°7	
18	0	127°7	126°6	123°4	123°2	122°5	121°7	117°3	119°6	120°0	120°4	121°7	
23	0	127°7	126°6	123°4	123°2	122°5	121°8	117°2	119°6	120°0	120°4	121°7	
28	0	129°7	126°6	123°4	123°2	122°5	121°8	117°7	119°3	120°0	121°5	122°8	
33	0	129°7	126°6	123°4	123°2	122°5	121°8	117°9	119°3	119°9	121°5	122°8	
38	0	128°9	126°5	124°8	123°2	121°4	121°8	119°3	118°6	120°0	121°5	122°8	
43	0	128°0	126°5	124°8	123°2	121°4	121°8	119°3	118°4	120°5	121°5	122°8	
48	0	128°0	125°7	124°8	123°3	121°4	119°0	119°3	118°4	120°5	121°7	122°8	
53	0	128°0	125°6	124°0	123°3	121°4	118°7	119°5	118°4	120°5	121°7	122°8	
58	0	128°0	125°6	124°0	122°8	121°4	118°7	119°6	118°4	120°8	121°7	122°4	
Thermometer		74°5	75°1	75°0	74°6	74°5	74°7	75°0	74°6	74°5	74°5	74°5	
Increasing Numbers denote decreasing Westerly Declination.													

MAGNETICAL OBSERVATIONS.

July 19th and 20th.

DECLINATION.

Angular Value of one Scale Division = 0".721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div. 112 <sup>o</sup> 5	Sc. Div. 115 <sup>o</sup> 6	Sc. Div. 119 <sup>o</sup> 2	Sc. Div. 120 <sup>o</sup> 0	Sc. Div. 120 <sup>o</sup> 8	Sc. Div. 123 <sup>o</sup> 4	Sc. Div. 120 <sup>o</sup> 2	Sc. Div. 117 <sup>o</sup> 9	Sc. Div. 112 <sup>o</sup> 0	Sc. Div. 107 <sup>o</sup> 4	Sc. Div. 105 <sup>o</sup> 4	Sc. Div. 106 <sup>o</sup> 4	Sc. Div. 108 <sup>o</sup> 2
112 <sup>o</sup> 4	116 <sup>o</sup> 2	119 <sup>o</sup> 2	120 <sup>o</sup> 0	121 <sup>o</sup> 8	124 <sup>o</sup> 0	120 <sup>o</sup> 0	117 <sup>o</sup> 0	111 <sup>o</sup> 5	107 <sup>o</sup> 2	105 <sup>o</sup> 4	106 <sup>o</sup> 7	108 <sup>o</sup> 4
113 <sup>o</sup> 3	116 <sup>o</sup> 2	119 <sup>o</sup> 4	120 <sup>o</sup> 2	122 <sup>o</sup> 8	123 <sup>o</sup> 2	118 <sup>o</sup> 6	117 <sup>o</sup> 3	110 <sup>o</sup> 8	107 <sup>o</sup> 0	105 <sup>o</sup> 4	107 <sup>o</sup> 3	108 <sup>o</sup> 4
113 <sup>o</sup> 4	116 <sup>o</sup> 4	119 <sup>o</sup> 4	120 <sup>o</sup> 2	122 <sup>o</sup> 4	122 <sup>o</sup> 4	118 <sup>o</sup> 8	117 <sup>o</sup> 2	110 <sup>o</sup> 4	105 <sup>o</sup> 4	105 <sup>o</sup> 6	107 <sup>o</sup> 4	108 <sup>o</sup> 8
113 <sup>o</sup> 6	116 <sup>o</sup> 8	119 <sup>o</sup> 4	120 <sup>o</sup> 4	122 <sup>o</sup> 4	122 <sup>o</sup> 4	118 <sup>o</sup> 4	116 <sup>o</sup> 2	110 <sup>o</sup> 3	105 <sup>o</sup> 0	105 <sup>o</sup> 3	107 <sup>o</sup> 4	108 <sup>o</sup> 6
114 <sup>o</sup> 3	117 <sup>o</sup> 0	119 <sup>o</sup> 5	120 <sup>o</sup> 4	121 <sup>o</sup> 5	121 <sup>o</sup> 6	118 <sup>o</sup> 6	114 <sup>o</sup> 8	109 <sup>o</sup> 4	105 <sup>o</sup> 6	105 <sup>o</sup> 4	107 <sup>o</sup> 3	109 <sup>o</sup> 3
114 <sup>o</sup> 3	117 <sup>o</sup> 2	119 <sup>o</sup> 8	120 <sup>o</sup> 6	122 <sup>o</sup> 4	121 <sup>o</sup> 6	118 <sup>o</sup> 9	114 <sup>o</sup> 4	109 <sup>o</sup> 3	106 <sup>o</sup> 4	105 <sup>o</sup> 6	107 <sup>o</sup> 4	108 <sup>o</sup> 8
114 <sup>o</sup> 4	117 <sup>o</sup> 4	119 <sup>o</sup> 8	120 <sup>o</sup> 2	122 <sup>o</sup> 4	121 <sup>o</sup> 5	119 <sup>o</sup> 4	114 <sup>o</sup> 2	109 <sup>o</sup> 2	106 <sup>o</sup> 2	105 <sup>o</sup> 7	107 <sup>o</sup> 4	109 <sup>o</sup> 0
114 <sup>o</sup> 8	117 <sup>o</sup> 6	120 <sup>o</sup> 0	119 <sup>o</sup> 8	122 <sup>o</sup> 4	121 <sup>o</sup> 6	117 <sup>o</sup> 8	114 <sup>o</sup> 2	108 <sup>o</sup> 8	105 <sup>o</sup> 8	105 <sup>o</sup> 7	107 <sup>o</sup> 5	109 <sup>o</sup> 2
115 <sup>o</sup> 4	118 <sup>o</sup> 0	120 <sup>o</sup> 2	119 <sup>o</sup> 8	122 <sup>o</sup> 0	121 <sup>o</sup> 4	118 <sup>o</sup> 4	113 <sup>o</sup> 6	108 <sup>o</sup> 4	105 <sup>o</sup> 4	105 <sup>o</sup> 8	107 <sup>o</sup> 5	109 <sup>o</sup> 3
115 <sup>o</sup> 2	118 <sup>o</sup> 4	120 <sup>o</sup> 4	119 <sup>o</sup> 8	122 <sup>o</sup> 4	120 <sup>o</sup> 9	117 <sup>o</sup> 4	113 <sup>o</sup> 6	107 <sup>o</sup> 4	105 <sup>o</sup> 2	105 <sup>o</sup> 9	107 <sup>o</sup> 6	109 <sup>o</sup> 4
115 <sup>o</sup> 4	119 <sup>o</sup> 0	120 <sup>o</sup> 4	120 <sup>o</sup> 0	123 <sup>o</sup> 2	120 <sup>o</sup> 1	117 <sup>o</sup> 4	112 <sup>o</sup> 4	107 <sup>o</sup> 6	105 <sup>o</sup> 3	106 <sup>o</sup> 4	107 <sup>o</sup> 8	109 <sup>o</sup> 4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1<sup>o</sup> decrease of Temperature, 1<sup>o</sup>61.

599 <sup>o</sup> 0	601 <sup>o</sup> 0	602 <sup>o</sup> 2	592 <sup>o</sup> 8	591 <sup>o</sup> 2	592 <sup>o</sup> 0	588 <sup>o</sup> 8	588 <sup>o</sup> 2	580 <sup>o</sup> 0	583 <sup>o</sup> 8	593 <sup>o</sup> 0	595 <sup>o</sup> 0	601 <sup>o</sup> 0
599 <sup>o</sup> 5	602 <sup>o</sup> 0	601 <sup>o</sup> 4	593 <sup>o</sup> 6	590 <sup>o</sup> 2	588 <sup>o</sup> 4	589 <sup>o</sup> 0	586 <sup>o</sup> 0	578 <sup>o</sup> 5	581 <sup>o</sup> 8	591 <sup>o</sup> 0	595 <sup>o</sup> 0	601 <sup>o</sup> 0
599 <sup>o</sup> 8	601 <sup>o</sup> 2	601 <sup>o</sup> 5	593 <sup>o</sup> 8	590 <sup>o</sup> 0	588 <sup>o</sup> 0	588 <sup>o</sup> 7	585 <sup>o</sup> 0	578 <sup>o</sup> 6	583 <sup>o</sup> 0	591 <sup>o</sup> 0	597 <sup>o</sup> 0	600 <sup>o</sup> 0
599 <sup>o</sup> 0	601 <sup>o</sup> 4	600 <sup>o</sup> 8	591 <sup>o</sup> 2	591 <sup>o</sup> 0	588 <sup>o</sup> 2	588 <sup>o</sup> 5	585 <sup>o</sup> 0	578 <sup>o</sup> 5	582 <sup>o</sup> 2	592 <sup>o</sup> 5	598 <sup>o</sup> 0	598 <sup>o</sup> 2
598 <sup>o</sup> 5	602 <sup>o</sup> 3	597 <sup>o</sup> 6	591 <sup>o</sup> 6	590 <sup>o</sup> 0	591 <sup>o</sup> 0	589 <sup>o</sup> 0	584 <sup>o</sup> 0	578 <sup>o</sup> 4	588 <sup>o</sup> 0	592 <sup>o</sup> 8	598 <sup>o</sup> 0	597 <sup>o</sup> 0
599 <sup>o</sup> 2	602 <sup>o</sup> 0	598 <sup>o</sup> 8	593 <sup>o</sup> 0	589 <sup>o</sup> 0	591 <sup>o</sup> 0	590 <sup>o</sup> 2	583 <sup>o</sup> 2	579 <sup>o</sup> 0	586 <sup>o</sup> 0	592 <sup>o</sup> 5	598 <sup>o</sup> 4	597 <sup>o</sup> 8
599 <sup>o</sup> 8	601 <sup>o</sup> 9	600 <sup>o</sup> 0	591 <sup>o</sup> 2	589 <sup>o</sup> 8	591 <sup>o</sup> 0	590 <sup>o</sup> 0	583 <sup>o</sup> 4	581 <sup>o</sup> 0	589 <sup>o</sup> 0	592 <sup>o</sup> 0	599 <sup>o</sup> 0	597 <sup>o</sup> 2
600 <sup>o</sup> 0	602 <sup>o</sup> 0	600 <sup>o</sup> 2	592 <sup>o</sup> 2	590 <sup>o</sup> 0	589 <sup>o</sup> 0	590 <sup>o</sup> 4	581 <sup>o</sup> 0	581 <sup>o</sup> 2	589 <sup>o</sup> 0	593 <sup>o</sup> 5	600 <sup>o</sup> 0	597 <sup>o</sup> 4
600 <sup>o</sup> 0	601 <sup>o</sup> 2	599 <sup>o</sup> 7	592 <sup>o</sup> 0	590 <sup>o</sup> 2	588 <sup>o</sup> 0	590 <sup>o</sup> 0	579 <sup>o</sup> 4	583 <sup>o</sup> 0	588 <sup>o</sup> 6	591 <sup>o</sup> 0	599 <sup>o</sup> 0	598 <sup>o</sup> 2
600 <sup>o</sup> 6	600 <sup>o</sup> 8	599 <sup>o</sup> 8	592 <sup>o</sup> 4	590 <sup>o</sup> 0	588 <sup>o</sup> 2	588 <sup>o</sup> 0	579 <sup>o</sup> 2	583 <sup>o</sup> 8	590 <sup>o</sup> 7	591 <sup>o</sup> 2	599 <sup>o</sup> 0	599 <sup>o</sup> 0
601 <sup>o</sup> 0	601 <sup>o</sup> 0	597 <sup>o</sup> 8	592 <sup>o</sup> 3	592 <sup>o</sup> 0	587 <sup>o</sup> 0	587 <sup>o</sup> 0	580 <sup>o</sup> 5	581 <sup>o</sup> 5	591 <sup>o</sup> 8	595 <sup>o</sup> 0	600 <sup>o</sup> 0	599 <sup>o</sup> 0
600 <sup>o</sup> 0	601 <sup>o</sup> 2	592 <sup>o</sup> 6	591 <sup>o</sup> 2	583 <sup>o</sup> 0	589 <sup>o</sup> 0	588 <sup>o</sup> 0	579 <sup>o</sup> 5	582 <sup>o</sup> 0	593 <sup>o</sup> 7	596 <sup>o</sup> 0	600 <sup>o</sup> 0	599 <sup>o</sup> 0
73 <sup>o</sup> 0	72 <sup>o</sup> 5	72 <sup>o</sup> 2	71 <sup>o</sup> 8	72 <sup>o</sup> 2	72 <sup>o</sup> 5	73 <sup>o</sup> 2	71 <sup>o</sup> 5	73 <sup>o</sup> 7	77 <sup>o</sup> 0	77 <sup>o</sup> 0	77 <sup>o</sup> 8	78 <sup>o</sup> 2

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1<sup>o</sup> decrease of Temperature, 1<sup>o</sup>61.

123 <sup>o</sup> 1	123 <sup>o</sup> 9	123 <sup>o</sup> 9	125 <sup>o</sup> 0	125 <sup>o</sup> 4	121 <sup>o</sup> 2	121 <sup>o</sup> 2	121 <sup>o</sup> 1	121 <sup>o</sup> 6	119 <sup>o</sup> 7	117 <sup>o</sup> 9	117 <sup>o</sup> 5	118 <sup>o</sup> 8
123 <sup>o</sup> 1	121 <sup>o</sup> 7	125 <sup>o</sup> 0	121 <sup>o</sup> 8	121 <sup>o</sup> 8	121 <sup>o</sup> 2	121 <sup>o</sup> 2	123 <sup>o</sup> 6	121 <sup>o</sup> 6	119 <sup>o</sup> 7	117 <sup>o</sup> 9	117 <sup>o</sup> 5	118 <sup>o</sup> 8
123 <sup>o</sup> 1	121 <sup>o</sup> 7	126 <sup>o</sup> 2	121 <sup>o</sup> 8	121 <sup>o</sup> 8	121 <sup>o</sup> 2	121 <sup>o</sup> 2	123 <sup>o</sup> 6	121 <sup>o</sup> 4	119 <sup>o</sup> 7	117 <sup>o</sup> 9	117 <sup>o</sup> 8	118 <sup>o</sup> 8
123 <sup>o</sup> 1	123 <sup>o</sup> 7	126 <sup>o</sup> 4	126 <sup>o</sup> 1	121 <sup>o</sup> 8	121 <sup>o</sup> 2	121 <sup>o</sup> 2	123 <sup>o</sup> 6	121 <sup>o</sup> 4	119 <sup>o</sup> 7	116 <sup>o</sup> 4	117 <sup>o</sup> 8	118 <sup>o</sup> 8
123 <sup>o</sup> 1	123 <sup>o</sup> 8	126 <sup>o</sup> 4	126 <sup>o</sup> 1	121 <sup>o</sup> 8	121 <sup>o</sup> 2	121 <sup>o</sup> 2	123 <sup>o</sup> 6	121 <sup>o</sup> 0	119 <sup>o</sup> 7	116 <sup>o</sup> 4	117 <sup>o</sup> 6	118 <sup>o</sup> 8
123 <sup>o</sup> 6	123 <sup>o</sup> 8	126 <sup>o</sup> 7	126 <sup>o</sup> 1	121 <sup>o</sup> 8	121 <sup>o</sup> 2	121 <sup>o</sup> 2	123 <sup>o</sup> 6	120 <sup>o</sup> 8	119 <sup>o</sup> 0	117 <sup>o</sup> 6	117 <sup>o</sup> 6	118 <sup>o</sup> 8
123 <sup>o</sup> 6	121 <sup>o</sup> 2	126 <sup>o</sup> 7	125 <sup>o</sup> 7	121 <sup>o</sup> 8	121 <sup>o</sup> 2	121 <sup>o</sup> 2	123 <sup>o</sup> 6	120 <sup>o</sup> 6	119 <sup>o</sup> 0	117 <sup>o</sup> 6	118 <sup>o</sup> 4	118 <sup>o</sup> 3
123 <sup>o</sup> 6	121 <sup>o</sup> 2	126 <sup>o</sup> 8	125 <sup>o</sup> 7	125 <sup>o</sup> 0	123 <sup>o</sup> 8	121 <sup>o</sup> 2	123 <sup>o</sup> 4	120 <sup>o</sup> 6	119 <sup>o</sup> 0	116 <sup>o</sup> 8	118 <sup>o</sup> 4	118 <sup>o</sup> 3
123 <sup>o</sup> 6	123 <sup>o</sup> 6	126 <sup>o</sup> 8	125 <sup>o</sup> 7	125 <sup>o</sup> 0	123 <sup>o</sup> 8	121 <sup>o</sup> 6	122 <sup>o</sup> 6	120 <sup>o</sup> 6	119 <sup>o</sup> 0	116 <sup>o</sup> 6	118 <sup>o</sup> 4	118 <sup>o</sup> 3
123 <sup>o</sup> 9	123 <sup>o</sup> 8	126 <sup>o</sup> 8	125 <sup>o</sup> 7	121 <sup>o</sup> 8	123 <sup>o</sup> 8	121 <sup>o</sup> 6	122 <sup>o</sup> 6	120 <sup>o</sup> 6	118 <sup>o</sup> 7	116 <sup>o</sup> 8	118 <sup>o</sup> 4	118 <sup>o</sup> 3
123 <sup>o</sup> 9	123 <sup>o</sup> 8	126 <sup>o</sup> 1	125 <sup>o</sup> 5	125 <sup>o</sup> 0	123 <sup>o</sup> 8	121 <sup>o</sup> 0	122 <sup>o</sup> 6	120 <sup>o</sup> 4	118 <sup>o</sup> 7	116 <sup>o</sup> 6	118 <sup>o</sup> 4	118 <sup>o</sup> 2
123 <sup>o</sup> 9	123 <sup>o</sup> 8	126 <sup>o</sup> 1	125 <sup>o</sup> 1	121 <sup>o</sup> 8	123 <sup>o</sup> 8	121 <sup>o</sup> 1	122 <sup>o</sup> 6	119 <sup>o</sup> 7	117 <sup>o</sup> 9	116 <sup>o</sup> 2	118 <sup>o</sup> 8	118 <sup>o</sup> 2
74 <sup>o</sup> 5	73 <sup>o</sup> 7	72 <sup>o</sup> 3	72 <sup>o</sup> 0	72 <sup>o</sup> 4	72 <sup>o</sup> 3	72 <sup>o</sup> 5	73 <sup>o</sup> 4	74 <sup>o</sup> 6	75 <sup>o</sup> 5	75 <sup>o</sup> 7	76 <sup>o</sup> 5	76 <sup>o</sup> 5

and increasing Horizontal and Vertical Force.

ION.

19 <sup>h</sup> .	20 <sup>h</sup> .
Sc. Div. 114 <sup>o</sup> 4	Sc. Div. 112 <sup>o</sup> 4
114 <sup>o</sup> 6	112 <sup>o</sup> 4
114 <sup>o</sup> 4	112 <sup>o</sup> 4
114 <sup>o</sup> 4	113 <sup>o</sup> 3
114 <sup>o</sup> 5	113 <sup>o</sup> 4
114 <sup>o</sup> 3	113 <sup>o</sup> 4
113 <sup>o</sup> 4	113 <sup>o</sup> 2
113 <sup>o</sup> 3	113 <sup>o</sup> 2
112 <sup>o</sup> 2	112 <sup>o</sup> 7
112 <sup>o</sup> 1	112 <sup>o</sup> 7
112 <sup>o</sup> 4	112 <sup>o</sup> 5
112 <sup>o</sup> 4	112 <sup>o</sup> 5

TAL. FORCE.

602 <sup>o</sup> 0	598 <sup>o</sup> 1
603 <sup>o</sup> 1	597 <sup>o</sup> 8
601 <sup>o</sup> 8	597 <sup>o</sup> 0
601 <sup>o</sup> 0	597 <sup>o</sup> 2
600 <sup>o</sup> 0	598 <sup>o</sup> 0
600 <sup>o</sup> 9	598 <sup>o</sup> 0
600 <sup>o</sup> 0	597 <sup>o</sup> 5
599 <sup>o</sup> 2	597 <sup>o</sup> 2
599 <sup>o</sup> 0	597 <sup>o</sup> 1
598 <sup>o</sup> 8	598 <sup>o</sup> 0
599 <sup>o</sup> 0	598 <sup>o</sup> 5
599 <sup>o</sup> 0	598 <sup>o</sup> 2
73 <sup>o</sup> 7	73 <sup>o</sup> 5

L. FORCE.

120 <sup>o</sup> 8	121 <sup>o</sup> 7
120 <sup>o</sup> 8	121 <sup>o</sup> 7
120 <sup>o</sup> 4	121 <sup>o</sup> 7
120 <sup>o</sup> 4	121 <sup>o</sup> 7
120 <sup>o</sup> 4	121 <sup>o</sup> 7
121 <sup>o</sup> 5	122 <sup>o</sup> 8
121 <sup>o</sup> 5	122 <sup>o</sup> 8
121 <sup>o</sup> 5	122 <sup>o</sup> 8
121 <sup>o</sup> 5	122 <sup>o</sup> 8
121 <sup>o</sup> 7	122 <sup>o</sup> 8
121 <sup>o</sup> 7	122 <sup>o</sup> 8
121 <sup>o</sup> 7	122 <sup>o</sup> 4
74 <sup>o</sup> 5	74 <sup>o</sup> 5

ing Westerly Declination,

August 25th and 26th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0".721.										DECLINATION.	
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	111.4	116.4	116.4	114.6	113.6	113.7	113.2	115.2	113.2	113.4	113.4	108.2
5	0	111.4	116.4	116.4	114.3	113.6	113.6	113.4	114.6	113.4	111.6	111.6	110.2
10	0	111.8	116.8	116.4	114.2	114.0	113.6	113.4	116.4	113.2	110.4	110.4	112.6
15	0	111.4	117.0	116.2	113.8	113.9	113.6	113.4	116.2	113.4	110.9	110.9	113.8
20	0	113.0	116.8	116.2	113.9	114.0	113.7	113.3	115.4	113.4	106.6	111.4	—
25	0	113.4	116.4	115.4	114.8	113.8	113.7	113.3	115.4	113.4	107.8	—	—
30	0	114.2	116.4	115.4	114.4	113.6	113.7	114.1	114.4	113.4	106.6	115.4	114
35	0	114.6	116.8	115.0	114.6	113.6	113.8	113.5	114.3	112.4	106.4	115.0	113
40	0	115.0	116.8	114.8	114.4	113.6	113.4	113.4	114.3	111.7	106.8	114.4	114
45	0	115.4	116.8	114.8	114.6	113.7	113.4	113.4	113.7	112.3	107.2	114.4	114
50	0	115.7	117.0	115.0	114.0	113.6	113.2	114.5	113.4	113.1	107.6	115.0	111
55	0	115.9	116.8	114.7	115.0	113.6	113.2	114.5	113.4	113.4	107.8	115.0	111

M.		One Scale Division = .000087 parts of the H. F.											HORIZONTAL FORCE.
		601.5	593.0	604.0	600.0	603.2	606.0	608.0	607.0	606.5	606.0	606.0	606.0
2	0	598.5	593.0	602.0	600.0	603.9	606.0	608.0	608.1	607.0	606.9	605.8	606
7	0	597.8	597.0	602.2	600.0	604.0	607.0	608.0	609.9	606.9	607.9	605.2	606
12	0	598.0	598.8	603.0	600.0	605.5	608.0	607.0	609.0	607.0	607.9	605.0	605
17	0	596.0	602.0	600.2	601.2	605.8	608.0	607.0	609.0	607.0	607.8	606.2	604
22	0	595.0	603.2	600.0	602.0	605.8	608.0	607.0	608.2	606.1	608.2	—	604
27	0	595.2	603.4	601.0	603.0	605.5	607.0	607.1	607.1	606.3	607.8	606.0	604
32	0	596.0	603.2	600.0	603.0	605.5	607.0	607.9	606.5	606.9	608.0	605.0	604
37	0	596.2	604.0	600.0	605.0	605.8	608.0	604.1	606.0	606.0	607.2	604.8	603
42	0	595.0	604.2	600.0	601.0	606.2	607.0	607.0	606.5	605.2	607.8	605.0	603
47	0	593.8	604.4	600.0	603.0	606.2	608.0	607.0	607.0	605.0	607.6	604.8	603
52	0	594.0	604.0	600.0	603.0	606.2	608.5	606.3	606.2	605.1	607.4	605.0	603

Thermometer		76.2	75.4	75.2	75.0	75.1	75.1	75.0	74.6	74.5	74.3	74.1
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M.		One Scale Division = .000063 parts of the V. F.											VERTICAL FORCE.
		116.5	118.3	118.6	117.2	115.9	114.0	114.5	115.3	111.7	115.5	116.0	
3	0	116.5 <th>118.3</th> <th>118.6</th> <th>117.0</th> <th>115.9</th> <th>114.0</th> <th>114.5</th> <th>115.3</th> <th>111.7</th> <th>115.5</th> <th>116.0</th>	118.3	118.6	117.0	115.9	114.0	114.5	115.3	111.7	115.5	116.0	
8	0	116.5 <th>118.3</th> <th>118.6</th> <th>117.0</th> <th>114.9</th> <th>114.0</th> <th>114.5</th> <th>115.3</th> <th>115.1</th> <th>115.5</th> <th>116.0</th>	118.3	118.6	117.0	114.9	114.0	114.5	115.3	115.1	115.5	116.0	
13	0	116.5 <th>118.3</th> <th>118.8</th> <th>117.0</th> <th>114.9</th> <th>114.0</th> <th>114.5</th> <th>115.3</th> <th>115.1</th> <th>115.5</th> <th>116.0</th>	118.3	118.8	117.0	114.9	114.0	114.5	115.3	115.1	115.5	116.0	
18	0	116.5 <th>118.5</th> <th>118.8</th> <th>116.0</th> <th>114.6</th> <th>114.0</th> <th>114.5</th> <th>115.0</th> <th>115.1</th> <th>115.5</th> <th>116.0</th>	118.5	118.8	116.0	114.6	114.0	114.5	115.0	115.1	115.5	116.0	
23	0	116.2 <th>118.5</th> <th>118.8</th> <th>116.0</th> <th>114.6</th> <th>114.0</th> <th>114.5</th> <th>114.7</th> <th>115.1</th> <th>115.5</th> <th>116.2</th>	118.5	118.8	116.0	114.6	114.0	114.5	114.7	115.1	115.5	116.2	
28	0	116.2 <th>118.5</th> <th>118.8</th> <th>116.0</th> <th>114.0</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.1</th> <th>115.5</th> <th>—</th>	118.5	118.8	116.0	114.0	114.0	115.3	114.7	115.1	115.5	—	
33	0	116.2 <th>118.5</th> <th>118.8</th> <th>116.0</th> <th>114.4</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.1</th> <th>115.5</th> <th>116.2</th>	118.5	118.8	116.0	114.4	114.0	115.3	114.7	115.1	115.5	116.2	
38	0	116.2 <th>118.6</th> <th>118.8</th> <th>116.0</th> <th>114.4</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.5</th> <th>116.0</th> <th>116.2</th>	118.6	118.8	116.0	114.4	114.0	115.3	114.7	115.5	116.0	116.2	
43	0	116.2 <th>118.6</th> <th>118.8</th> <th>116.0</th> <th>114.4</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.5</th> <th>116.0</th> <th>116.2</th>	118.6	118.8	116.0	114.4	114.0	115.3	114.7	115.5	116.0	116.2	
48	0	113.9 <th>118.6</th> <th>118.9</th> <th>116.0</th> <th>114.0</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.5</th> <th>116.0</th> <th>116.2</th>	118.6	118.9	116.0	114.0	114.0	115.3	114.7	115.5	116.0	116.2	
53	0	113.9 <th>118.6</th> <th>117.9</th> <th>116.0</th> <th>114.0</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.5</th> <th>116.0</th> <th>116.2</th>	118.6	117.9	116.0	114.0	114.0	115.3	114.7	115.5	116.0	116.2	
58	0	113.7 <th>118.6</th> <th>117.9</th> <th>115.9</th> <th>114.0</th> <th>114.0</th> <th>115.3</th> <th>114.7</th> <th>115.5</th> <th>115.7</th> <th>116.7</th>	118.6	117.9	115.9	114.0	114.0	115.3	114.7	115.5	115.7	116.7	

Thermometer		74.0	74.2	74.2	74.0	74.2	74.0	75.0	75.0	74.5	74.5	74.3
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Increasing Numbers denote decreasing Westerly Declination.



MAGNETICAL OBSERVATIONS.

August 25th and 26th.

DECLINATION.

Angular Value of one Scale Division = 0".721.

21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .				
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
113.4	108.2	115.0	118.0	118.0	122.6	122.6	129.6	128.3	122.0	114.5	108.4	101.7	101.2	106.0	110.0	115.0	115.4	119.6	122.8	129.4	127.0	121.0	114.0	108.2	105.2	101.0	106.4	110.2
111.6	110.2	115.8	119.8	119.8	123.8	123.8	128.6	126.6	120.6	113.4	108.3	101.6	101.0	106.4	110.4	115.8	115.4	119.8	123.8	128.6	126.6	120.4	112.4	108.3	101.6	101.0	106.4	110.4
110.4	112.6	115.0	119.8	120.4	124.0	124.0	128.0	126.0	120.0	113.4	108.2	101.6	101.2	106.8	111.0	115.0	117.6	121.4	125.0	127.4	125.6	119.4	112.4	107.4	101.6	101.8	107.4	111.2
110.9	113.8	115.0	117.6	121.4	125.0	125.0	127.4	125.6	119.4	112.4	107.4	101.6	101.8	107.4	111.8	117.0	117.0	120.8	127.0	128.0	124.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
106.6	114.4	115.0	117.6	121.6	126.6	126.6	127.6	125.0	118.6	111.6	106.8	101.6	101.6	107.4	111.8	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
107.8	—	114.2	117.8	121.6	126.6	126.6	127.6	125.0	118.6	111.6	106.8	101.6	101.6	107.4	111.8	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
106.6	115.4	114.0	117.0	120.8	127.0	127.0	128.0	124.6	116.0	110.2	105.4	105.0	105.0	108.4	112.1	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
106.4	115.0	113.8	117.4	121.2	127.4	127.4	128.4	124.2	117.2	110.4	106.6	105.0	101.8	108.4	112.0	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
106.8	114.4	114.2	117.4	122.2	127.4	127.4	128.3	123.6	117.0	110.2	105.4	105.0	105.0	108.4	112.1	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
107.2	114.4	114.0	117.6	122.4	129.2	129.2	128.2	123.6	116.4	109.6	105.0	101.8	105.0	108.8	112.0	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
107.6	115.0	114.4	117.6	122.4	129.2	129.2	127.6	121.8	116.0	109.6	105.0	101.4	105.4	109.0	112.0	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.0	101.8	108.2	111.8
107.8	115.0	114.4	118.0	122.4	129.3	129.3	127.6	122.0	115.4	109.2	101.6	101.6	105.6	109.4	113.2	117.0	117.0	120.8	127.0	128.0	123.6	118.2	111.3	106.1	105.6	101.6	109.4	113.2

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

606.5	604.8	606.0	602.0	598.0	589.0	582.1	579.0	576.0	581.2	591.2	600.0	604.0
606.2	605.0	605.4	602.2	597.0	589.0	582.1	579.0	577.0	581.4	591.0	600.0	604.1
605.8	604.2	607.0	602.0	598.0	588.0	582.2	578.5	578.0	582.2	591.7	600.8	605.0
605.0	605.0	601.0	602.0	596.0	588.0	582.0	578.0	578.2	583.4	591.8	601.2	605.2
604.8	605.0	604.8	601.2	594.5	587.1	582.0	577.5	579.0	584.0	592.8	602.0	605.2
604.2	605.0	604.8	600.0	594.5	586.5	582.0	577.5	580.0	585.0	593.2	602.2	608.8
604.0	605.2	605.0	600.0	595.2	586.0	581.0	577.0	581.0	586.0	594.2	602.8	609.2
604.0	605.0	602.2	600.4	593.5	585.0	581.0	577.0	581.0	587.0	594.5	601.8	608.0
603.8	606.0	602.2	600.2	594.8	584.0	580.0	578.0	581.0	587.8	597.0	601.2	608.4
603.5	604.4	602.2	598.6	594.0	584.4	580.0	577.0	581.0	588.2	597.8	601.5	608.2
603.0	606.0	602.0	598.0	594.2	583.4	580.0	576.0	581.5	588.0	599.0	602.2	609.4
603.0	606.0	601.8	597.0	594.2	583.0	579.0	576.5	581.5	588.8	598.0	603.2	608.2

73.6	75.5	72.7	72.8	73.0	73.1	73.8	74.8	75.3	75.4	75.4	75.5	75.3
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

115.5	116.0	117.7	117.9	118.0	117.7	117.3	116.8	114.0	114.0	115.0	116.6	116.5
115.5	116.0	117.0	117.9	118.0	117.7	117.3	116.7	114.0	114.0	115.0	116.6	116.5
115.5	116.0	117.1	117.9	118.0	117.7	117.3	116.2	114.0	114.0	115.1	116.6	116.4
115.5	116.0	117.1	117.5	117.9	117.5	117.3	116.0	114.0	114.0	116.0	116.6	116.4
115.5	116.2	117.1	117.5	117.9	117.7	117.3	116.0	114.2	114.0	116.0	116.6	116.4
115.5	116.2	117.5	117.5	117.9	117.7	117.3	116.0	114.2	114.0	116.0	116.6	116.6
115.5	116.2	117.5	117.7	117.9	117.6	117.3	115.2	114.2	114.0	116.3	116.5	117.0
116.0	116.2	117.5	117.7	117.9	117.6	117.4	117.3	115.2	114.2	114.0	116.3	115.8
116.0	116.2	117.5	117.7	117.9	117.6	117.4	117.3	115.0	114.2	114.3	116.6	115.8
116.0	116.2	117.8	117.7	117.9	117.6	117.4	116.8	115.0	114.2	115.0	116.7	115.8
116.0	116.2	118.0	117.7	118.0	117.6	117.3	116.8	115.0	114.2	115.0	116.7	115.8
115.7	116.7	118.0	117.7	118.0	117.6	117.3	116.8	115.0	114.2	115.0	116.7	117.0

74.5	74.3	73.8	73.5	73.3	73.1	73.0	72.8	73.0	73.7	74.5	74.0	74.5	74.0	74.0
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and increasing Horizontal and Vertical Force.

Westerly Declination.

September 20th and 21st.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0".721.						DECLINATION.					
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	109 <sup>h</sup> 4	113 <sup>h</sup> 3	113 <sup>h</sup> 6	112 <sup>h</sup> 8	111 <sup>h</sup> 8	111 <sup>h</sup> 4	111 <sup>h</sup> 2	115 <sup>h</sup> 7	114 <sup>h</sup> 6	114 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 6
5	0	108 <sup>h</sup> 6	113 <sup>h</sup> 3	113 <sup>h</sup> 6	112 <sup>h</sup> 4	111 <sup>h</sup> 8	111 <sup>h</sup> 4	111 <sup>h</sup> 4	115 <sup>h</sup> 4	114 <sup>h</sup> 5	114 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 4
10	0	110 <sup>h</sup> 4	112 <sup>h</sup> 6	114 <sup>h</sup> 2	112 <sup>h</sup> 4	112 <sup>h</sup> 8	113 <sup>h</sup> 4	113 <sup>h</sup> 8	115 <sup>h</sup> 3	114 <sup>h</sup> 4	113 <sup>h</sup> 6	114 <sup>h</sup> 6	114 <sup>h</sup> 6
15	0	110 <sup>h</sup> 4	112 <sup>h</sup> 4	114 <sup>h</sup> 4	112 <sup>h</sup> 4	113 <sup>h</sup> 4	113 <sup>h</sup> 4	113 <sup>h</sup> 8	115 <sup>h</sup> 8	114 <sup>h</sup> 4	114 <sup>h</sup> 6	114 <sup>h</sup> 6	114 <sup>h</sup> 6
20	0	110 <sup>h</sup> 4	112 <sup>h</sup> 9	114 <sup>h</sup> 2	112 <sup>h</sup> 4	113 <sup>h</sup> 4	114 <sup>h</sup> 8	115 <sup>h</sup> 0	116 <sup>h</sup> 0	114 <sup>h</sup> 4	115 <sup>h</sup> 0	114 <sup>h</sup> 4	114 <sup>h</sup> 4
25	0	111 <sup>h</sup> 3	113 <sup>h</sup> 4	113 <sup>h</sup> 6	113 <sup>h</sup> 8	113 <sup>h</sup> 8	114 <sup>h</sup> 8	115 <sup>h</sup> 2	116 <sup>h</sup> 2	114 <sup>h</sup> 4	115 <sup>h</sup> 0	114 <sup>h</sup> 4	114 <sup>h</sup> 4
30	0	111 <sup>h</sup> 5	113 <sup>h</sup> 5	114 <sup>h</sup> 4	112 <sup>h</sup> 4	114 <sup>h</sup> 0	114 <sup>h</sup> 4	115 <sup>h</sup> 4	115 <sup>h</sup> 4	114 <sup>h</sup> 5	114 <sup>h</sup> 6	114 <sup>h</sup> 6	114 <sup>h</sup> 6
35	0	112 <sup>h</sup> 3	113 <sup>h</sup> 4	114 <sup>h</sup> 8	112 <sup>h</sup> 2	113 <sup>h</sup> 1	113 <sup>h</sup> 8	115 <sup>h</sup> 4	115 <sup>h</sup> 0	114 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 6
40	0	112 <sup>h</sup> 2	113 <sup>h</sup> 4	114 <sup>h</sup> 4	113 <sup>h</sup> 0	114 <sup>h</sup> 0	114 <sup>h</sup> 4	115 <sup>h</sup> 4	115 <sup>h</sup> 4	114 <sup>h</sup> 8	114 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 7
45	0	112 <sup>h</sup> 4	113 <sup>h</sup> 4	113 <sup>h</sup> 4	112 <sup>h</sup> 2	114 <sup>h</sup> 9	115 <sup>h</sup> 4	114 <sup>h</sup> 0	115 <sup>h</sup> 4	114 <sup>h</sup> 6	114 <sup>h</sup> 4	114 <sup>h</sup> 4	115 <sup>h</sup> 2
50	0	112 <sup>h</sup> 4	113 <sup>h</sup> 4	113 <sup>h</sup> 4	111 <sup>h</sup> 4	116 <sup>h</sup> 8	114 <sup>h</sup> 6	114 <sup>h</sup> 2	115 <sup>h</sup> 5	114 <sup>h</sup> 4	114 <sup>h</sup> 5	114 <sup>h</sup> 4	114 <sup>h</sup> 4
55	0	113 <sup>h</sup> 2	113 <sup>h</sup> 4	113 <sup>h</sup> 2	111 <sup>h</sup> 4	115 <sup>h</sup> 4	114 <sup>h</sup> 4	114 <sup>h</sup> 4	115 <sup>h</sup> 4	114 <sup>h</sup> 2	114 <sup>h</sup> 6	114 <sup>h</sup> 6	114 <sup>h</sup> 6
		One Scale Division = 1/1000087 parts of the H. F.						HORIZONTAL FORCE.					
M.	S.	618 <sup>h</sup> 0	626 <sup>h</sup> 0	624 <sup>h</sup> 7	624 <sup>h</sup> 0	623 <sup>h</sup> 8	637 <sup>h</sup> 2	624 <sup>h</sup> 0	622 <sup>h</sup> 5	623 <sup>h</sup> 0	623 <sup>h</sup> 2	624 <sup>h</sup> 0	625 <sup>h</sup> 0
7	0	618 <sup>h</sup> 0	626 <sup>h</sup> 5	625 <sup>h</sup> 0	624 <sup>h</sup> 4	624 <sup>h</sup> 1	637 <sup>h</sup> 8	622 <sup>h</sup> 4	622 <sup>h</sup> 4	622 <sup>h</sup> 8	624 <sup>h</sup> 2	623 <sup>h</sup> 9	625 <sup>h</sup> 0
12	0	617 <sup>h</sup> 2	625 <sup>h</sup> 0	622 <sup>h</sup> 9	625 <sup>h</sup> 0	623 <sup>h</sup> 2	631 <sup>h</sup> 2	620 <sup>h</sup> 2	621 <sup>h</sup> 4	623 <sup>h</sup> 0	625 <sup>h</sup> 2	625 <sup>h</sup> 0	625 <sup>h</sup> 0
17	0	616 <sup>h</sup> 0	623 <sup>h</sup> 2	622 <sup>h</sup> 5	626 <sup>h</sup> 0	622 <sup>h</sup> 2	628 <sup>h</sup> 2	619 <sup>h</sup> 4	621 <sup>h</sup> 2	623 <sup>h</sup> 2	624 <sup>h</sup> 5	625 <sup>h</sup> 3	625 <sup>h</sup> 3
22	0	617 <sup>h</sup> 0	622 <sup>h</sup> 0	623 <sup>h</sup> 1	625 <sup>h</sup> 2	622 <sup>h</sup> 2	628 <sup>h</sup> 8	618 <sup>h</sup> 5	621 <sup>h</sup> 2	623 <sup>h</sup> 0	625 <sup>h</sup> 0	625 <sup>h</sup> 0	625 <sup>h</sup> 0
27	0	616 <sup>h</sup> 5	622 <sup>h</sup> 0	622 <sup>h</sup> 4	625 <sup>h</sup> 0	622 <sup>h</sup> 0	628 <sup>h</sup> 5	618 <sup>h</sup> 0	621 <sup>h</sup> 0	623 <sup>h</sup> 0	624 <sup>h</sup> 0	625 <sup>h</sup> 5	625 <sup>h</sup> 5
32	0	618 <sup>h</sup> 6	622 <sup>h</sup> 9	622 <sup>h</sup> 0	624 <sup>h</sup> 2	622 <sup>h</sup> 4	623 <sup>h</sup> 4	620 <sup>h</sup> 6	621 <sup>h</sup> 0	622 <sup>h</sup> 0	624 <sup>h</sup> 0	625 <sup>h</sup> 0	625 <sup>h</sup> 0
37	0	620 <sup>h</sup> 9	624 <sup>h</sup> 0	622 <sup>h</sup> 4	624 <sup>h</sup> 4	622 <sup>h</sup> 2	627 <sup>h</sup> 4	621 <sup>h</sup> 0	620 <sup>h</sup> 8	622 <sup>h</sup> 0	624 <sup>h</sup> 0	625 <sup>h</sup> 1	625 <sup>h</sup> 1
42	0	622 <sup>h</sup> 0	623 <sup>h</sup> 5	623 <sup>h</sup> 2	624 <sup>h</sup> 2	622 <sup>h</sup> 8	629 <sup>h</sup> 5	621 <sup>h</sup> 4	619 <sup>h</sup> 4	622 <sup>h</sup> 0	624 <sup>h</sup> 3	625 <sup>h</sup> 1	625 <sup>h</sup> 1
47	0	623 <sup>h</sup> 2	624 <sup>h</sup> 0	624 <sup>h</sup> 2	623 <sup>h</sup> 8	622 <sup>h</sup> 0	627 <sup>h</sup> 0	621 <sup>h</sup> 2	619 <sup>h</sup> 2	622 <sup>h</sup> 2	624 <sup>h</sup> 0	625 <sup>h</sup> 5	625 <sup>h</sup> 5
52	0	624 <sup>h</sup> 0	625 <sup>h</sup> 0	624 <sup>h</sup> 0	623 <sup>h</sup> 6	635 <sup>h</sup> 4	626 <sup>h</sup> 8	621 <sup>h</sup> 4	619 <sup>h</sup> 0	622 <sup>h</sup> 3	624 <sup>h</sup> 0	625 <sup>h</sup> 0	625 <sup>h</sup> 0
57	0	623 <sup>h</sup> 5	624 <sup>h</sup> 8	624 <sup>h</sup> 2	623 <sup>h</sup> 8	639 <sup>h</sup> 8	625 <sup>h</sup> 8	621 <sup>h</sup> 6	622 <sup>h</sup> 0	622 <sup>h</sup> 0	624 <sup>h</sup> 0	625 <sup>h</sup> 0	625 <sup>h</sup> 0
Thermometer		63 <sup>h</sup> 8	63 <sup>h</sup> 8	63 <sup>h</sup> 8	63 <sup>h</sup> 9	63 <sup>h</sup> 8	64 <sup>h</sup> 6	63 <sup>h</sup> 4	63 <sup>h</sup> 0	62 <sup>h</sup> 6	62 <sup>h</sup> 4	61 <sup>h</sup> 8	61 <sup>h</sup> 8
		One Scale Division = 1/1000063 parts of the V. F.						VERTICAL FORCE.					
M.	S.	137 <sup>h</sup> 3	138 <sup>h</sup> 4	138 <sup>h</sup> 4	136 <sup>h</sup> 4	135 <sup>h</sup> 6	130 <sup>h</sup> 4	132 <sup>h</sup> 7	133 <sup>h</sup> 0	135 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 8
8	0	137 <sup>h</sup> 4	138 <sup>h</sup> 4	138 <sup>h</sup> 4	136 <sup>h</sup> 0	135 <sup>h</sup> 6	130 <sup>h</sup> 4	132 <sup>h</sup> 8	133 <sup>h</sup> 0	134 <sup>h</sup> 0	134 <sup>h</sup> 0	134 <sup>h</sup> 8	134 <sup>h</sup> 8
13	0	137 <sup>h</sup> 4	138 <sup>h</sup> 4	137 <sup>h</sup> 6	136 <sup>h</sup> 2	135 <sup>h</sup> 6	130 <sup>h</sup> 4	132 <sup>h</sup> 8	133 <sup>h</sup> 0	134 <sup>h</sup> 0	134 <sup>h</sup> 8	135 <sup>h</sup> 4	135 <sup>h</sup> 4
18	0	137 <sup>h</sup> 4	138 <sup>h</sup> 4	137 <sup>h</sup> 6	136 <sup>h</sup> 2	135 <sup>h</sup> 5	129 <sup>h</sup> 6	132 <sup>h</sup> 8	133 <sup>h</sup> 2	134 <sup>h</sup> 0	134 <sup>h</sup> 8	135 <sup>h</sup> 4	135 <sup>h</sup> 4
23	0	137 <sup>h</sup> 4	138 <sup>h</sup> 4	137 <sup>h</sup> 6	136 <sup>h</sup> 2	135 <sup>h</sup> 5	129 <sup>h</sup> 6	132 <sup>h</sup> 8	133 <sup>h</sup> 2	134 <sup>h</sup> 9	134 <sup>h</sup> 8	135 <sup>h</sup> 3	135 <sup>h</sup> 3
28	0	137 <sup>h</sup> 4	138 <sup>h</sup> 4	137 <sup>h</sup> 6	136 <sup>h</sup> 0	135 <sup>h</sup> 5	129 <sup>h</sup> 6	133 <sup>h</sup> 0	133 <sup>h</sup> 2	134 <sup>h</sup> 9	134 <sup>h</sup> 8	135 <sup>h</sup> 0	135 <sup>h</sup> 0
33	0	138 <sup>h</sup> 1	138 <sup>h</sup> 4	136 <sup>h</sup> 6	136 <sup>h</sup> 0	135 <sup>h</sup> 5	129 <sup>h</sup> 5	133 <sup>h</sup> 0	133 <sup>h</sup> 2	134 <sup>h</sup> 9	134 <sup>h</sup> 8	134 <sup>h</sup> 7	134 <sup>h</sup> 7
38	0	138 <sup>h</sup> 0	138 <sup>h</sup> 4	136 <sup>h</sup> 5	135 <sup>h</sup> 7	135 <sup>h</sup> 5	129 <sup>h</sup> 5	133 <sup>h</sup> 0	133 <sup>h</sup> 2	134 <sup>h</sup> 9	134 <sup>h</sup> 8	134 <sup>h</sup> 7	134 <sup>h</sup> 7
43	0	138 <sup>h</sup> 4	138 <sup>h</sup> 4	136 <sup>h</sup> 5	135 <sup>h</sup> 7	135 <sup>h</sup> 5	129 <sup>h</sup> 5	133 <sup>h</sup> 0	133 <sup>h</sup> 2	134 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 7	134 <sup>h</sup> 7
48	0	138 <sup>h</sup> 4	138 <sup>h</sup> 4	136 <sup>h</sup> 5	135 <sup>h</sup> 7	135 <sup>h</sup> 8	132 <sup>h</sup> 7	133 <sup>h</sup> 0	133 <sup>h</sup> 2	134 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 7	134 <sup>h</sup> 7
53	0	138 <sup>h</sup> 4	138 <sup>h</sup> 4	136 <sup>h</sup> 4	135 <sup>h</sup> 6	134 <sup>h</sup> 9	132 <sup>h</sup> 7	133 <sup>h</sup> 0	133 <sup>h</sup> 2	134 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 7	134 <sup>h</sup> 7
58	0	138 <sup>h</sup> 4	138 <sup>h</sup> 4	136 <sup>h</sup> 4	135 <sup>h</sup> 6	134 <sup>h</sup> 3	132 <sup>h</sup> 7	133 <sup>h</sup> 0	133 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 8	134 <sup>h</sup> 7	134 <sup>h</sup> 7
Thermometer		62 <sup>h</sup> 8	63 <sup>h</sup> 0	63 <sup>h</sup> 0	63 <sup>h</sup> 6	63 <sup>h</sup> 7	63 <sup>h</sup> 5	63 <sup>h</sup> 4	63 <sup>h</sup> 5	63 <sup>h</sup> 1	62 <sup>h</sup> 9	62 <sup>h</sup> 7	62 <sup>h</sup> 7

Increasing Numbers denote decreasing Westerly Declination.

DECLINATION.

18°.	19°.	20°.
114°6	114°4	114°6
114°5	114°4	114°4
114°4	113°6	114°6
114°4	114°6	114°6
114°4	115°0	114°4
114°4	115°0	114°4
114°5	114°6	114°8
114°4	114°4	114°7
114°6	114°4	115°2
114°4	114°5	114°4
114°2	114°6	114°6

HORIZONTAL FORCE.

623°0	623°2	624°0
622°8	624°2	623°9
623°0	625°2	625°0
623°2	624°5	625°3
623°0	625°0	625°0
623°0	624°0	625°5
622°0	624°0	625°0
622°0	624°0	625°1
622°0	624°3	625°1
622°2	624°0	625°5
622°3	624°0	625°0
622°0	624°0	625°0

VERTICAL FORCE.

131°8	131°8	131°8
131°0	131°8	131°8
131°0	131°8	135°1
131°0	131°8	135°4
131°9	131°8	135°3
131°9	131°8	135°0
131°9	131°8	131°7
131°9	131°8	131°7
131°8	131°8	131°7
131°8	131°8	131°7
131°8	131°8	131°7

decreasing Westerly Declination,

MAGNETICAL OBSERVATIONS. September 20th and 21st.

DECLINATION. Angular Value of one Scale Division = 0°721.

21°.	22°.	23°.	0°.	1°.	2°.	3°.	4°.	5°.	6°.	7°.	8°.	9°.
114°4	113°0	116°7	120°4	122°6	122°8	120°0	116°6	113°8	109°3	107°6	109°0	110°9
113°4	113°0	116°5	120°4	122°2	122°4	119°1	116°4	113°4	109°0	107°7	109°0	111°0
112°4	113°8	116°9	120°6	122°0	122°2	119°1	116°4	112°5	108°9	107°8	109°2	111°2
113°0	115°4	117°4	121°4	122°2	122°8	119°4	116°0	111°9	108°8	107°8	109°2	111°6
112°4	115°4	117°7	121°4	122°6	123°0	119°3	115°6	111°4	108°4	107°8	109°6	112°0
110°6	115°8	118°2	121°4	122°4	121°0	119°4	115°0	110°5	108°3	108°0	110°0	112°6
110°0	116°0	118°4	121°5	123°2	123°5	119°4	115°2	110°4	108°1	108°0	109°5	112°4
109°0	116°5	119°3	121°6	121°0	123°0	119°4	115°4	110°4	108°2	108°4	110°0	112°4
108°9	116°4	120°1	121°2	124°8	122°8	119°4	115°0	110°8	107°8	108°6	110°4	112°4
109°4	115°9	120°4	121°7	123°1	122°4	118°9	114°5	110°4	108°0	108°6	110°4	112°6
110°4	116°4	120°4	122°4	123°6	120°4	118°4	114°0	109°7	108°0	108°8	110°6	112°6
111°6	116°6	120°4	123°1	123°4	120°2	117°6	114°0	103°5	107°7	108°8	111°0	112°8

HORIZONTAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°63.

624°0	626	629°2	625°0	619°0	611°8	601°2	595°7	597°0	602°2	609°0	621°0	628°0
623°5	626°	628°0	626°0	618°7	610°4	600°4	595°4	597°5	602°8	609°4	622°5	627°8
622°6	625	627°9	625°1	617°2	610°2	600°5	595°5	598°0	601°0	611°8	623°0	625°0
623°5	626	628°0	624°0	616°2	609°4	599°0	596°0	598°2	601°0	613°0	621°5	623°0
620°5	626°8	629°0	623°5	615°1	608°2	597°4	596°2	598°9	605°0	613°0	621°0	622°5
620°0	626°8	629°0	623°7	614°0	608°0	596°2	596°0	599°0	606°0	611°0	621°5	623°0
619°5	627°0	629°0	623°2	612°5	608°2	595°0	595°8	599°2	606°0	611°0	623°0	623°0
620°0	628°0	628°2	623°1	611°5	605°7	595°2	596°0	600°0	606°2	614°5	623°0	623°0
620°0	628°0	627°1	622°0	611°2	603°8	595°0	596°0	600°2	606°8	616°0	623°2	621°5
620°0	628°0	627°0	621°0	611°2	601°2	595°0	596°1	601°2	607°0	617°5	622°0	625°0
623°0	628°2	627°5	620°0	611°0	601°2	595°0	596°5	602°0	607°8	619°2	623°0	625°0
625°5	629°7	626°9	619°8	611°2	601°2	595°0	596°6	602°0	608°0	620°5	625°3	625°0

61°6 61°3 61°0 61°4 60°6 60°2 60°6 61°2 61°6 62°0 62°0 61°5 62°0

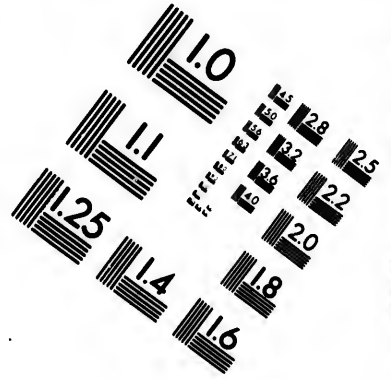
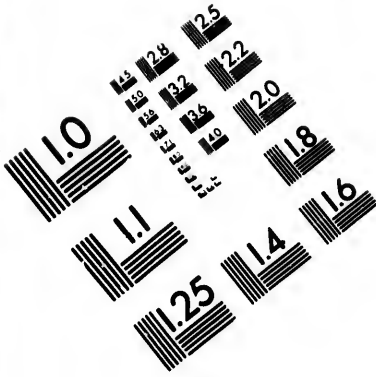
VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1°64.

131°7	131°4	136°7	137°5	138°8	140°8	139°5	139°4	139°4	139°2	140°7	141°5	141°9
131°7	131°4	136°7	137°5	139°2	141°2	139°0	139°4	139°4	139°2	140°7	141°5	141°9
134°7	131°4	137°1	137°5	139°2	141°2	139°0	139°4	139°4	139°2	140°7	142°0	141°9
131°7	131°4	137°1	137°5	139°3	141°2	139°0	139°4	139°4	139°2	140°7	142°0	141°9
131°4	131°2	137°1	137°5	140°0	141°2	139°0	139°4	139°3	139°2	140°7	142°0	141°9
131°0	131°9	137°5	137°5	140°0	141°5	139°0	139°4	139°3	139°2	140°7	142°0	141°3
131°4	131°9	137°5	138°5	140°0	141°5	138°6	139°4	139°7	139°2	140°7	142°4	141°3
131°4	135°6	137°5	138°5	140°0	140°7	138°6	139°4	139°7	139°2	140°7	142°4	141°3
131°4	135°6	137°5	138°5	140°0	139°9	138°6	139°4	139°7	139°2	141°5	142°3	140°9
131°4	136°7	137°5	138°8	140°8	139°9	138°6	139°4	139°7	139°4	141°5	141°9	140°9
131°4	136°7	137°5	138°8	140°8	139°9	138°6	139°4	139°7	139°4	141°5	141°9	140°9

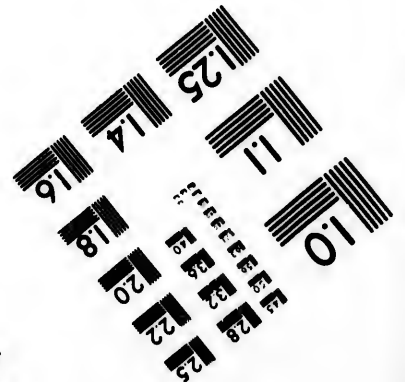
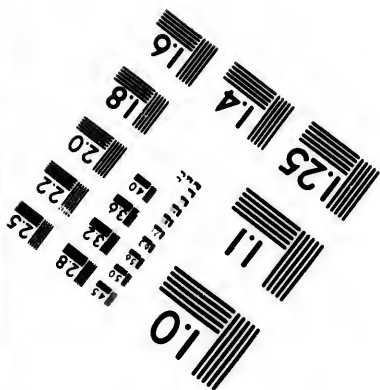
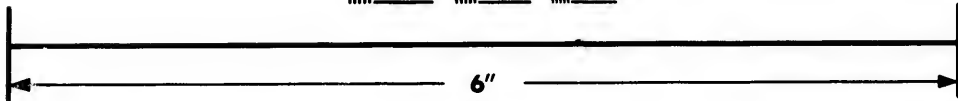
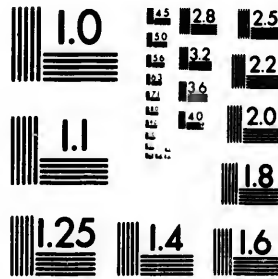
62°5 62°4 62°5 62°0 61°2 60°7 61°3 61°3 61°5 61°5 61°5 61°5 61°5

and increasing Horizontal and Vertical Force,





**IMAGE EVALUATION  
TEST TARGET (MT-3)**



**Photographic  
Sciences  
Corporation**

23 WEST MAIN STREET  
WEBSTER, N.Y. 14580  
(716) 872-4503

1.8  
2.0  
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October 18th and 19th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0° 721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	93° 4	115° 8	98° 2	92° 5	118° 8	122° 0	127° 4	100° 5	105° 0	82° 0	65° 0	65° 0
5	0	101° 3	120° 4	113° 8	104° 8	121° 2	119° 8	123° 6	90° 4	107° 8	83° 4	89° 4	78° 0
10	0	93° 7	109° 4	121° 5	109° 4	125° 4	114° 8	121° 8	119° 8	98° 4	89° 4	89° 4	92° 0
15	0	106° 4	101° 8	118° 4	125° 8	118° 6	122° 2	117° 7	123° 4	109° 4	87° 4	87° 4	107° 0
20	0	101° 6	110° 6	113° 4	136° 4	102° 8	124° 8	116° 4	124° 4	110° 8	91° 0	91° 0	137° 0
25	0	95° 4	103° 5	110° 4	161° 8	99° 2	120° 4	116° 4	100° 4	115° 0	91° 2	91° 2	130° 8
30	0	98° 4	91° 4	108° 4	108° 4	101° 4	111° 2	118° 4	87° 4	114° 4	102° 4	123° 2	123° 2
35	0	106° 6	95° 9	103° 5	78° 6	106° 8	111° 0	116° 8	100° 4	113° 4	121° 6	135° 0	135° 0
40	0	120° 4	98° 9	105° 2	101° 8	101° 5	111° 8	115° 7	95° 4	107° 9	139° 0	139° 0	139° 0
45	0	123° 4	105° 4	105° 6	108° 4	105° 8	115° 4	107° 6	94° 4	97° 4	120° 4	139° 6	139° 6
50	0	115° 4	91° 2	104° 3	126° 4	109° 4	126° 0	121° 8	98° 4	85° 4	83° 4	141° 8	141° 8
55	0	118° 4	101° 4	106° 4	125° 2	119° 2	129° 5	118° 8	102° 4	78° 4	65° 0	147° 0	147° 0
M. S.		One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
		679° 0	719° 4	830° 0	676° 5	625° 4	648° 4	593° 4	565° 0	552° 0	560° 0	529° 8	
2	0	700° 0	665° 0	879° 0	758° 8	623° 4	629° 2	598° 3	573° 0	572° 2	500° 5	478° 8	
7	0	687° 5	664° 5	787° 0	808° 4	621° 8	614° 2	601° 0	597° 0	538° 6	502° 7	325° 0	
12	0	692° 0	658° 4	782° 0	758° 5	618° 5	591° 0	599° 0	624° 4	537° 2	443° 0	331° 5	
17	0	733° 0	646° 4	725° 0	827° 4	606° 2	593° 2	598° 0	621° 6	530° 0	393° 0	518° 0	
22	0	742° 8	679° 8	730° 0	938° 4	620° 8	594° 0	592° 0	585° 0	542° 4	388° 3	520° 0	
27	0	790° 0	703° 5	686° 0	722° 0	617° 6	596° 2	590° 0	551° 0	561° 0	422° 5	517° 5	
32	0	770° 0	708° 0	709° 0	655° 4	614° 4	595° 0	590° 0	552° 0	568° 2	455° 3	547° 5	
37	0	800° 0	726° 1	700° 0	694° 4	621° 5	587° 8	560° 4	544° 0	525° 0	337° 8	535° 0	
42	0	767° 5	683° 0	701° 2	720° 2	621° 7	590° 3	535° 0	516° 2	550° 0	505° 0	524° 0	
47	0	813° 0	680° 0	680° 0	668° 8	630° 2	597° 2	571° 0	543° 8	540° 0	515° 0	496° 5	
52	0	770° 0	692° 0	691° 0	652° 4	635° 4	591° 2	579° 5	543° 8	510° 5	492° 0	478° 5	
57	0												
Thermometer		52° 9	52° 9	52° 9	53° 0	53° 2	53° 4	53° 6	53° 5	53° 2	53° 4	53° 5	
M. S.		One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
		276° 1	299° 5	336° 5	269° 3	270° 1	276° 9	259° 6	223° 0	219° 1	201° 0	184° 0	
3	0	295° 3	292° 7	327° 3	281° 8	269° 5	261° 4	259° 6	226° 4	219° 7	207° 3	193° 0	
8	0	288° 2	287° 8	317° 1	277° 8	261° 4	268° 5	259° 1	237° 5	228° 2	190° 2	191° 8	
13	0	284° 2	292° 5	321° 6	264° 2	255° 2	261° 5	258° 1	233° 2	228° 2	165° 0	184° 0	
18	0	303° 1	280° 0	317° 0	251° 5	259° 6	259° 0	258° 1	232° 7	223° 1	163° 9	149° 8	
23	0	312° 0	292° 1	318° 6	216° 4	268° 1	256° 3	257° 6	204° 8	223° 1	170° 0	111° 1	
28	0	312° 0	305° 0	305° 7	202° 5	268° 3	257° 2	257° 6	216° 2	219° 3	181° 3	154° 6	
33	0	315° 0	305° 0	312° 0	248° 4	262° 1	258° 3	251° 9	216° 5	219° 3	169° 5	168° 5	
38	0	330° 5	314° 5	306° 8	256° 1	269° 8	257° 5	237° 6	211° 2	203° 2	141° 7	157° 0	
43	0	312° 2	304° 1	304° 7	268° 0	269° 8	266° 3	236° 4	211° 6	204° 3	167° 0	157° 2	
48	0	335° 5	304° 9	291° 2	276° 3	274° 6	266° 4	234° 6	211° 6	201° 0	161° 6	159° 3	
53	0	334° 5	317° 2	294° 5	279° 4	269° 4	263° 0	234° 6	211° 6	287° 7	184° 4	163° 0	
58	0												
Thermometer		52° 7	52° 7	53° 9	51° 0	54° 2	51° 0	51° 2	54° 6	54° 4	54° 6	55° 2	
Increasing Numbers denote decreasing Westerly Declination.													

NATION.

19°	20°
82°0	65°0
83°4	78°0
89°4	92°0
87°4	107°0
91°0	137°0
91°2	130°8
102°4	123°2
121°6	137°0
139°0	139°0
120°4	139°6
83°4	141°8
65°0	147°0

HORIZONTAL FORCE.

560°0	529°8
500°5	478°8
502°7	525°0
443°0	531°5
393°0	548°0
388°3	520°0
422°5	517°5
457°3	517°5
437°8	535°0
505°0	524°0
515°0	496°5
492°0	478°5
53°4	53°5

VERTICAL FORCE.

201°0	181°0
207°3	193°0
190°2	191°8
165°0	184°0
163°9	149°8
170°0	141°4
181°3	154°6
169°5	168°5
141°7	157°0
167°0	157°2
161°6	159°3
184°4	163°0
54°6	53°2

and increasing Westerly Declination,

MAGNETICAL OBSERVATIONS.													October 18th and 19th.	
DECLINATION.													Angular Value of one Scale Division = 0° 721.	
21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
146°5	136°0	117°4	93°5	106°4	111°6	120°0	110°6	112°0	109°4	110°6	107°4	110°0	146°5	136°0
150°4	133°4	120°4	83°2	108°8	113°4	120°4	119°0	109°4	109°9	113°4	109°0	109°0	150°4	133°4
163°8	129°8	118°6	76°0	112°8	115°5	118°4	112°5	111°2	110°0	108°1	108°0	108°9	163°8	129°8
159°4	123°4	117°4	78°0	105°4	117°4	117°6	112°3	111°0	106°0	109°8	109°4	107°0	159°4	123°4
147°0	120°0	111°4	78°1	116°0	116°4	111°4	112°8	109°4	110°4	108°4	110°3	107°7	147°0	120°0
147°4	127°2	114°4	89°4	121°2	117°6	114°4	113°8	108°8	111°2	108°0	110°9	106°6	147°4	127°2
150°4	125°9	113°3	90°5	117°4	118°4	116°6	110°8	108°5	109°4	108°0	111°0	106°6	150°4	125°9
147°4	124°1	113°0	91°6	118°8	118°8	118°4	110°9	109°4	107°0	109°5	110°4	107°6	147°4	124°1
141°0	107°0	114°4	98°0	120°4	119°6	121°4	111°4	114°4	108°0	109°4	109°6	107°4	141°0	107°0
137°0	105°5	104°4	98°4	114°8	119°8	118°4	112°8	110°6	108°4	109°0	110°0	107°6	137°0	105°5
137°5	114°9	101°5	97°0	115°1	117°4	118°9	113°4	111°2	110°8	110°4	109°8	108°3	137°5	114°9
137°0	112°4	92°5	103°5	115°4	118°4	120°1	112°6	110°4	110°2	110°3	109°6	109°7	137°0	112°4
HORIZONTAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.	
400°0	535°5	586°0	548°5	587°0	589°6	581°2	578°0	587°0	593°2	608°4	595°5	611°5	400°0	535°5
448°0	561°6	604°0	545°0	588°8	593°8	579°1	579°0	592°0	591°0	607°0	597°2	613°0	448°0	561°6
485°5	560°4	589°5	519°0	575°5	591°5	574°5	577°5	590°0	591°0	609°0	597°0	622°0	485°5	560°4
468°9	571°5	587°0	516°0	591°2	591°2	576°0	581°0	590°0	602°0	605°4	598°2	620°5	468°9	571°5
481°0	567°5	584°2	521°5	594°5	589°4	572°0	590°0	590°0	600°0	597°5	598°0	625°0	481°0	567°5
511°9	589°5	585°0	521°5	604°2	588°8	570°0	591°0	590°0	593°8	615°0	605°0	624°0	511°9	589°5
517°0	565°0	583°0	558°3	603°5	588°8	569°0	591°0	590°2	600°0	603°5	609°0	616°5	517°0	565°0
520°0	608°0	587°0	557°5	601°8	583°8	570°5	595°0	593°0	599°2	597°0	612°0	609°0	520°0	608°0
526°0	573°5	585°0	579°0	601°4	581°6	578°5	592°2	601°2	598°0	591°0	612°2	609°0	526°0	573°5
523°0	577°5	567°5	575°0	598°6	583°8	580°5	591°5	602°0	598°0	589°5	611°0	609°0	523°0	577°5
526°0	591°0	559°5	570°0	601°2	581°4	586°0	586°0	594°4	598°2	587°5	610°0	609°8	526°0	591°0
529°0	586°0	554°5	590°0	600°7	580°2	577°7	592°0	590°2	599°2	591°6	610°5	611°3	529°0	586°0
53°0	52°8	52°6	52°9	52°9	52°8	52°9	52°9	53°5	53°5	53°5	54°3	54°5	53°0	52°8
VERTICAL FORCE.													Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.	
150°9	196°9	223°8	214°3	218°4	232°7	238°4	248°0	238°0	237°8	245°3	242°4	240°8	150°9	196°9
178°7	210°9	232°2	219°5	219°0	232°9	237°9	248°0	238°0	237°8	245°3	242°4	240°8	178°7	210°9
177°3	214°0	224°3	200°3	225°2	235°2	239°7	248°0	238°0	237°8	243°1	242°4	242°6	177°3	214°0
179°5	228°0	224°3	210°8	228°4	235°2	238°1	248°0	238°0	238°5	243°6	242°4	242°6	179°5	228°0
172°7	230°4	224°3	210°1	227°9	235°2	238°1	248°0	238°2	239°1	241°6	240°8	243°1	172°7	230°4
169°9	224°9	224°3	202°2	227°9	234°3	240°0	240°7	238°2	239°4	248°8	240°8	243°3	169°9	224°9
170°6	232°5	225°6	208°7	228°4	234°1	339°5	240°7	238°5	239°7	245°8	241°1	243°2	170°6	232°5
172°0	231°1	230°7	214°3	229°9	226°0	239°5	240°7	238°5	239°7	243°7	241°1	242°0	172°0	231°1
173°0	227°0	228°5	212°4	230°1	235°3	239°9	241°7	240°1	239°7	243°7	241°1	242°0	173°0	227°0
175°4	222°5	221°2	218°2	230°1	236°1	241°6	241°5	240°1	243°1	243°2	241°1	242°0	175°4	222°5
178°5	228°4	219°6	214°2	231°4	238°5	241°6	238°1	237°8	241°7	242°4	240°8	243°2	178°5	228°4
186°1	227°4	219°0	216°5	231°4	238°4	242°8	238°1	237°8	241°7	242°4	240°8	243°2	186°1	227°4
54°4	54°2	54°2	54°2	54°2	53°6	53°3	53°2	53°7	53°7	54°5	54°5	54°7	54°4	54°2



November 24th and 25th.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0°721.						DECLINATION.					
		10°.	11°.	12°.	13°.	14°.	15°.	16°.	17°.	18°.	19°.	20°.	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	111°4	111°2	112°2	113°5	113°6	113°4	112°0	111°4	111°8	113°3	113°0	
5	0	110°4	110°4	112°1	114°2	113°4	113°0	111°7	111°4	112°3	113°4	113°0	
10	0	111°4	111°6	112°5	114°2	113°5	113°4	111°5	111°3	112°4	113°4	112°9	
15	0	111°2	111°5	113°4	114°4	113°3	113°0	111°6	111°9	111°9	113°6	111°8	
20	0	111°4	111°2	113°5	114°2	113°4	113°0	111°6	111°4	112°4	113°5	113°0	
25	0	110°2	111°8	112°2	114°0	113°1	112°4	111°6	111°8	112°0	113°2	113°5	
30	0	111°4	111°8	114°2	113°8	113°4	112°4	111°6	111°6	112°4	112°6	112°0	
35	0	110°4	111°8	113°4	113°5	113°1	112°2	111°9	111°6	112°3	112°0	111°3	
40	0	111°2	112°4	113°4	113°4	114°0	112°0	111°6	111°5	112°4	112°0	110°4	
45	0	111°4	112°0	113°4	112°6	113°3	112°2	111°5	111°8	113°0	112°3	109°3	
50	0	111°2	113°2	113°4	113°8	113°4	112°0	111°5	111°3	113°3	112°7	108°4	
55	0	110°2	111°8	113°4	113°4	113°4	111°8	111°6	111°8	113°4	113°0	109°4	
		One Scale Division = '000087 parts of the H. F.						HORIZONTAL FORCE.					
M.	S.												
2	0	631°2	630°2	631°2	632°2	633°0	631°2	631°5	631°0	631°0	630°5	636°0	
7	0	631°5	630°2	631°2	632°2	633°2	631°2	631°1	631°0	631°0	631°0	635°0	
12	0	631°0	631°2	632°2	633°4	633°2	631°8	631°0	631°0	629°0	631°0	635°0	
17	0	629°2	630°8	632°4	631°0	632°2	632°0	631°2	631°0	629°0	631°1	637°1	
22	0	631°8	629°2	631°2	631°2	631°8	632°0	631°0	630°5	630°0	632°5	637°0	
27	0	631°2	630°2	633°2	633°0	632°2	631°8	630°0	629°5	629°2	633°5	633°0	
32	0	628°2	630°2	635°4	633°0	632°4	632°0	631°0	630°0	630°0	635°0	635°0	
37	0	626°8	629°2	636°0	631°4	631°2	631°8	630°8	630°0	630°1	631°0	630°0	
42	0	632°2	630°0	632°8	631°2	631°4	630°0	630°2	629°0	630°2	631°5	632°0	
47	0	632°5	631°8	632°2	630°8	631°7	630°2	629°8	631°5	629°0	632°0	632°0	
52	0	630°8	631°8	633°8	631°0	631°8	630°3	630°0	633°0	629°7	632°5	632°0	
57	0	630°2	631°0	635°0	632°4	632°0	631°0	629°7	631°3	630°2	632°2	635°0	
Thermometer		52°8	53°6	54°1	55°0	55°0	55°0	55°0	54°8	54°4	54°4	54°6	
		One Scale Division = '000063 parts of the V. F.						VERTICAL FORCE.					
M.	S.												
3	0	239°1	235°0	231°1	233°1	232°5	231°6	230°6	232°9	235°0	232°0	230°7	
8	0	238°3	235°3	231°1	233°1	232°5	231°6	231°4	232°9	235°0	232°0	230°7	
13	0	237°8	235°3	231°9	232°7	232°7	231°6	231°4	232°9	234°6	231°6	230°7	
18	0	237°8	235°3	231°9	232°7	232°7	231°6	231°4	232°9	234°6	231°6	230°7	
23	0	237°0	234°0	235°0	232°7	232°7	231°6	231°5	232°9	234°6	231°6	230°7	
28	0	236°5	233°9	235°0	232°2	232°1	231°6	231°5	233°1	234°6	231°6	229°9	
33	0	236°1	233°9	235°0	232°2	232°1	231°6	231°5	233°1	234°6	231°6	230°0	
38	0	235°4	233°9	235°0	232°2	232°1	231°6	231°7	235°0	233°0	231°6	229°5	
43	0	235°4	233°3	234°2	232°1	232°1	230°6	232°9	235°0	233°0	231°6	229°5	
48	0	235°0	233°3	233°1	232°3	232°1	230°6	232°9	235°0	232°7	231°6	229°5	
53	0	235°0	233°9	233°1	232°3	232°1	230°6	232°9	235°0	232°0	231°6	228°2	
58	0	235°0	234°1	233°1	232°3	232°1	230°6	232°9	235°0	232°0	230°7	228°2	
Thermometer		52°2	54°2	55°2	56°0	55°7	55°8	55°8	55°7	55°3	56°2	56°8	
Increasing Numbers denote decreasing Westerly Declination.													

MAGNETICAL OBSERVATIONS.

November 24th and 25th.

DECLINATION.

Angular Value of one Scale Division = 0'.721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div. 109.4	Sc. Div. 118.5	Sc. Div. 123.4	Sc. Div. 120.2	Sc. Div. 117.2	Sc. Div. 119.8	Sc. Div. 119.0	Sc. Div. 113.9	Sc. Div. 108.7	Sc. Div. 105.6	Sc. Div. 106.4	Sc. Div. 109.4	Sc. Div. 111.4
110.5	118.3	123.5	119.2	120.4	129.4	117.4	113.4	108.8	106.4	106.6	109.0	111.6
112.4	112.6	122.4	120.3	118.4	120.4	112.4	113.3	109.4	106.2	107.2	109.8	112.2
114.3	115.5	120.6	119.4	118.8	120.0	113.4	114.4	108.2	106.3	107.0	109.7	112.2
114.4	115.4	119.2	119.9	116.4	121.6	115.0	113.2	107.6	106.3	107.4	110.1	112.4
118.5	116.5	119.4	120.2	119.0	121.8	116.0	112.5	106.6	106.0	107.5	110.4	112.4
119.6	117.4	118.3	119.4	118.4	126.0	114.4	111.6	106.6	105.6	108.4	110.4	113.2
121.6	115.5	119.7	119.5	120.3	123.8	117.4	111.4	107.4	105.6	108.5	110.4	113.4
122.2	120.0	119.2	119.2	121.8	123.5	113.7	110.4	107.0	105.4	109.0	110.4	113.2
122.0	118.6	120.2	119.4	122.0	122.8	113.6	110.0	106.5	106.2	109.6	110.8	113.3
120.4	120.5	119.2	118.6	121.5	125.4	114.0	110.0	106.6	106.2	109.4	111.1	113.4
120.4	120.8	119.0	117.8	121.4	125.6	114.1	109.4	105.7	105.4	109.6	111.4	113.4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'63.

638.0	642.0	640.8	640.2	629.0	633.3	618.0	613.2	613.5	618.5	629.0	635.0	638.0
638.5	637.2	640.0	637.3	631.2	626.0	610.0	612.5	615.0	621.2	630.0	635.0	638.0
641.1	638.9	640.5	639.0	633.5	627.0	618.0	616.0	623.0	629.0	635.8	637.9	637.9
643.7	637.5	640.2	611.4	631.0	627.4	619.0	613.0	618.0	623.0	630.0	636.5	637.0
639.0	640.2	638.5	639.5	631.0	623.9	618.0	614.0	619.0	624.0	632.0	636.0	637.5
642.0	640.2	637.8	638.7	630.0	624.0	620.0	614.3	618.5	625.0	630.0	637.0	636.9
641.0	641.2	638.0	639.4	629.8	625.0	607.5	611.0	620.0	625.0	630.0	637.0	636.0
643.5	640.5	610.2	637.8	631.0	625.2	618.0	615.0	619.0	626.0	631.0	637.0	634.5
641.0	639.9	638.8	638.0	629.0	627.0	621.0	611.5	618.2	628.0	632.0	637.0	636.9
640.0	641.8	610.0	638.4	628.8	626.8	617.0	611.0	620.5	627.5	631.0	637.0	637.5
640.0	642.5	638.8	633.4	628.0	623.0	611.0	617.5	621.0	632.0	633.5	637.5	636.0
642.0	643.0	640.0	634.0	628.0	622.8	615.0	615.5	619.0	632.0	634.0	637.0	638.0

54.6	54.5	54.1	53.9	53.8	53.2	52.5	52.2	52.2	52.0	52.0	51.8	52.0
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VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64.

228.2	228.7	227.5	228.2	230.2	236.9	237.4	239.0	239.7	240.9	241.9	242.0	242.5
227.1	228.7	227.8	228.2	230.2	236.0	237.4	239.0	239.7	240.9	241.9	242.0	242.5
227.0	228.6	227.8	228.2	230.7	236.5	238.1	238.4	239.7	240.9	241.9	242.0	242.5
225.2	228.6	227.8	228.2	230.7	235.9	238.1	238.4	239.7	241.6	241.9	242.4	242.3
223.3	228.6	227.8	229.4	230.7	235.9	238.1	238.4	239.7	241.6	241.9	242.5	242.3
223.3	228.6	228.1	229.4	232.0	235.5	239.0	238.4	239.7	241.6	241.9	242.5	242.3
224.1	228.1	228.1	229.4	232.0	235.5	236.4	239.7	239.7	241.6	241.9	242.5	242.3
221.6	228.1	228.1	229.4	232.0	235.5	238.5	239.7	239.7	241.6	241.9	242.5	242.3
226.1	227.7	228.1	229.7	232.8	235.5	238.5	239.7	239.7	241.6	242.0	242.5	242.3
228.9	227.7	228.2	229.7	232.8	235.5	238.5	239.7	240.0	241.6	242.0	242.5	242.3
227.4	227.7	228.2	230.0	232.8	234.8	238.5	239.7	240.9	242.3	242.0	242.5	242.3
228.4	227.5	228.2	230.2	232.8	234.8	238.5	239.7	240.9	242.3	242.0	242.5	242.3

57.0	56.4	55.6	56.3	55.4	53.9	53.0	52.2	52.7	52.2	52.2	52.2	52.2
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and increasing Horizontal and Vertical Force.

ATION.

19 <sup>h</sup> .	20 <sup>h</sup> .
Sc. Div. 113.3	Sc. Div. 113.0
113.4	113.0
113.4	112.9
113.6	111.8
113.5	113.0
113.2	113.5
112.6	112.0
112.0	111.3
112.0	110.4
112.3	109.3
112.7	108.4
113.0	109.4

ONTAL FORCE.

630.5	636.0
631.0	635.0
631.0	635.0
631.4	637.1
632.5	637.0
633.5	633.0
635.0	635.0
631.0	630.0
631.5	632.0
632.0	632.0
632.5	632.0
632.2	635.0

54.4	51.6
------	------

AL FORCE.

232.0	230.7
232.0	230.7
231.6	230.7
231.6	230.7
231.6	230.7
231.6	229.5
231.6	229.5
231.6	229.5
231.6	229.5
231.6	228.2
230.7	228.2

asing Westerly Declination,

December 20th and 21st.		MAGNETICAL OBSERVATIONS.											
Mean Göttingen Time.		Angular Value of one Scale Division = 0' 721.						DECLINATION.					
		10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	
M.	S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0	0	109'8	111'8	112'6	112'4	111'3	114'4	114'4	115'6	113'6	112'8	113'4	113'4
5	0	110'0	112'0	112'6	112'6	111'1	114'4	114'4	115'8	113'6	113'2	113'4	113'4
10	0	110'4	112'0	112'5	112'9	114'2	114'4	114'4	115'4	114'6	113'5	113'6	113'6
15	0	110'0	112'6	112'5	112'9	114'4	114'4	114'4	116'4	114'6	113'4	113'3	113'3
20	0	110'4	112'3	112'6	113'2	114'4	114'4	114'4	116'4	114'4	112'8	113'0	113'0
25	0	110'4	112'4	112'7	113'4	114'4	114'6	115'5	116'5	114'3	112'4	113'0	113'0
30	0	110'6	112'4	112'7	114'3	114'4	114'9	115'5	116'5	114'0	112'4	113'8	113'8
35	0	110'9	112'4	112'6	114'4	114'4	114'4	115'2	115'8	112'8	112'8	114'0	114'0
40	0	110'9	112'2	112'4	114'5	115'2	114'4	115'4	116'4	113'4	113'0	114'0	114'0
45	0	111'0	112'4	112'3	114'5	115'1	114'4	115'2	115'8	114'0	113'4	113'8	113'8
50	0	111'2	112'4	112'4	114'5	115'4	114'4	115'2	114'8	114'2	113'6	113'4	113'4
55	0	111'6	112'4	112'3	114'5	114'5	114'4	115'4	113'6	113'3	113'8	113'4	113'4
M. S.		One Scale Division = 0'00087 parts of the H. F.										HORIZONTAL FORCE.	
		664'0	663'5	663'0	660'0	661'4	663'1	662'0	663'0	661'6	666'6	668'0	668'0
2	0	665'0	663'5	663'0	661'0	662'5	662'9	662'0	661'8	662'2	667'4	668'2	
7	0	665'5	663'5	663'0	660'3	662'0	663'1	662'2	663'0	667'0	668'4	668'4	
12	0	665'0	661'0	663'0	660'2	662'0	663'0	662'2	663'2	663'5	666'9	668'4	
17	0	663'1	664'0	662'2	660'2	662'0	663'0	662'0	663'2	663'8	667'0	668'0	
22	0	662'5	661'0	662'3	660'2	663'0	663'0	662'0	663'2	664'0	667'5	668'2	
27	0	663'5	663'4	663'0	660'0	663'0	663'0	663'0	663'8	665'4	667'8	669'0	
32	0	664'0	663'4	664'0	660'8	663'0	662'5	662'8	663'2	665'5	668'0	669'2	
37	0	664'5	663'5	663'0	660'2	664'0	662'7	662'8	664'8	665'2	667'4	669'3	
42	0	664'5	663'0	662'9	661'1	664'0	662'2	662'4	664'2	665'8	667'4	668'5	
47	0	664'1	663'0	661'5	661'7	664'0	663'0	662'4	663'0	666'6	667'2	667'8	
52	0	664'0	663'0	660'5	662'0	664'0	662'0	662'0	664'5	667'2	667'4	667'0	
57	0	664'0	663'0	660'5	662'0	664'0	662'0	662'0	664'5	667'2	667'4	667'0	
Thermometer		47'4	48'3	48'7	48'7	48'7	48'2	47'9	47'1	46'1	46'1	45'8	
M. S.		One Scale Division = 0'00063 parts of the V. F.										VERTICAL FORCE.	
		248'6	246'7	244'7	245'0	241'9	245'6	246'1	246'6	247'3	247'3	247'1	247'1
3	0	248'6	245'8	244'7	245'0	244'9	245'6	246'1	246'6	247'3	247'3	247'2	
8	0	248'6	245'8	244'7	245'0	244'9	245'6	246'1	246'6	247'3	247'3	247'2	
13	0	247'9	245'8	244'7	244'9	241'9	245'6	246'1	246'6	247'3	247'3	247'2	
18	0	247'9	245'6	245'4	244'9	241'9	245'6	246'1	247'0	247'3	247'3	247'2	
23	0	246'8	245'6	245'4	244'9	241'9	245'6	246'1	247'0	247'1	247'3	247'2	
28	0	246'8	244'8	245'4	244'9	241'9	245'6	246'1	247'0	247'1	247'3	247'2	
33	0	246'8	244'8	245'4	244'9	241'9	245'6	246'1	247'0	247'1	247'3	247'2	
38	0	246'8	244'8	245'0	244'9	244'9	245'6	246'1	247'0	247'1	247'3	247'2	
43	0	246'8	244'8	245'0	244'9	244'9	245'6	246'1	247'0	247'1	247'3	247'2	
48	0	246'8	244'8	245'9	244'9	244'9	245'6	246'1	247'0	247'3	247'1	247'1	
53	0	246'7	244'8	245'9	244'9	245'6	245'6	246'1	247'0	247'3	247'1	247'1	
58	0	246'7	244'8	245'9	244'9	245'6	246'1	246'1	247'0	247'3	247'1	247'1	
Thermometer		47'0	48'0	48'7	48'4	48'7	48'4	48'0	47'0	46'4	46'4	46'2	
Increasing Numbers denote decreasing Westerly Declination.													

MAGNETICAL OBSERVATIONS.

December 20th and 21st.

DECLINATION.

Angular Value of one Scale Division = 0' 721.

21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
113 <sup>h</sup> 2	115 <sup>h</sup> 0	107 <sup>h</sup> 6	107 <sup>h</sup> 4	101 <sup>h</sup> 9	117 <sup>h</sup> 5	121 <sup>h</sup> 6	119 <sup>h</sup> 1	114 <sup>h</sup> 8	110 <sup>h</sup> 8	109 <sup>h</sup> 5	109 <sup>h</sup> 4	110 <sup>h</sup> 4
113 <sup>h</sup> 3	116 <sup>h</sup> 4	107 <sup>h</sup> 4	109 <sup>h</sup> 8	102 <sup>h</sup> 3	115 <sup>h</sup> 6	123 <sup>h</sup> 0	118 <sup>h</sup> 3	117 <sup>h</sup> 4	111 <sup>h</sup> 4	108 <sup>h</sup> 8	109 <sup>h</sup> 4	110 <sup>h</sup> 8
113 <sup>h</sup> 3	116 <sup>h</sup> 4	105 <sup>h</sup> 4	110 <sup>h</sup> 1	103 <sup>h</sup> 4	118 <sup>h</sup> 6	122 <sup>h</sup> 9	118 <sup>h</sup> 1	115 <sup>h</sup> 0	110 <sup>h</sup> 4	109 <sup>h</sup> 0	108 <sup>h</sup> 6	110 <sup>h</sup> 4
107 <sup>h</sup> 8	116 <sup>h</sup> 2	102 <sup>h</sup> 4	108 <sup>h</sup> 6	105 <sup>h</sup> 4	117 <sup>h</sup> 6	122 <sup>h</sup> 4	118 <sup>h</sup> 1	115 <sup>h</sup> 4	111 <sup>h</sup> 3	109 <sup>h</sup> 2	109 <sup>h</sup> 1	110 <sup>h</sup> 4
115 <sup>h</sup> 9	115 <sup>h</sup> 6	100 <sup>h</sup> 7	108 <sup>h</sup> 6	107 <sup>h</sup> 4	118 <sup>h</sup> 1	121 <sup>h</sup> 6	118 <sup>h</sup> 2	115 <sup>h</sup> 8	111 <sup>h</sup> 4	107 <sup>h</sup> 4	109 <sup>h</sup> 3	110 <sup>h</sup> 5
116 <sup>h</sup> 0	116 <sup>h</sup> 3	96 <sup>h</sup> 6	106 <sup>h</sup> 7	109 <sup>h</sup> 4	120 <sup>h</sup> 1	122 <sup>h</sup> 4	117 <sup>h</sup> 4	115 <sup>h</sup> 4	111 <sup>h</sup> 0	107 <sup>h</sup> 0	109 <sup>h</sup> 3	111 <sup>h</sup> 3
117 <sup>h</sup> 9	117 <sup>h</sup> 3	96 <sup>h</sup> 4	106 <sup>h</sup> 4	109 <sup>h</sup> 4	121 <sup>h</sup> 4	122 <sup>h</sup> 1	117 <sup>h</sup> 4	112 <sup>h</sup> 4	110 <sup>h</sup> 4	108 <sup>h</sup> 7	109 <sup>h</sup> 2	111 <sup>h</sup> 4
117 <sup>h</sup> 9	119 <sup>h</sup> 4	91 <sup>h</sup> 9	105 <sup>h</sup> 6	110 <sup>h</sup> 0	121 <sup>h</sup> 2	121 <sup>h</sup> 6	116 <sup>h</sup> 4	110 <sup>h</sup> 3	109 <sup>h</sup> 2	109 <sup>h</sup> 0	109 <sup>h</sup> 2	111 <sup>h</sup> 6
118 <sup>h</sup> 1	116 <sup>h</sup> 0	90 <sup>h</sup> 0	105 <sup>h</sup> 2	110 <sup>h</sup> 7	123 <sup>h</sup> 4	121 <sup>h</sup> 4	117 <sup>h</sup> 6	114 <sup>h</sup> 8	108 <sup>h</sup> 4	108 <sup>h</sup> 6	109 <sup>h</sup> 4	112 <sup>h</sup> 0
116 <sup>h</sup> 4	113 <sup>h</sup> 4	91 <sup>h</sup> 4	105 <sup>h</sup> 4	111 <sup>h</sup> 4	124 <sup>h</sup> 5	122 <sup>h</sup> 4	115 <sup>h</sup> 4	115 <sup>h</sup> 2	107 <sup>h</sup> 8	109 <sup>h</sup> 4	109 <sup>h</sup> 0	111 <sup>h</sup> 4
116 <sup>h</sup> 6	111 <sup>h</sup> 6	95 <sup>h</sup> 4	101 <sup>h</sup> 4	115 <sup>h</sup> 2	123 <sup>h</sup> 3	119 <sup>h</sup> 4	117 <sup>h</sup> 0	116 <sup>h</sup> 4	108 <sup>h</sup> 4	109 <sup>h</sup> 6	109 <sup>h</sup> 5	111 <sup>h</sup> 5
114 <sup>h</sup> 4	111 <sup>h</sup> 2	102 <sup>h</sup> 4	101 <sup>h</sup> 3	116 <sup>h</sup> 4	122 <sup>h</sup> 4	119 <sup>h</sup> 3	117 <sup>h</sup> 4	112 <sup>h</sup> 8	110 <sup>h</sup> 4	109 <sup>h</sup> 4	110 <sup>h</sup> 0	112 <sup>h</sup> 4

HORIZONTAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 63.

667 <sup>h</sup> 0	661 <sup>h</sup> 0	653 <sup>h</sup> 0	682 <sup>h</sup> 0	671 <sup>h</sup> 0	663 <sup>h</sup> 0	658 <sup>h</sup> 5	652 <sup>h</sup> 0	651 <sup>h</sup> 2	655 <sup>h</sup> 4	651 <sup>h</sup> 0	653 <sup>h</sup> 0	667 <sup>h</sup> 0
667 <sup>h</sup> 2	667 <sup>h</sup> 0	658 <sup>h</sup> 0	684 <sup>h</sup> 5	670 <sup>h</sup> 0	660 <sup>h</sup> 0	659 <sup>h</sup> 0	652 <sup>h</sup> 0	650 <sup>h</sup> 2	651 <sup>h</sup> 6	651 <sup>h</sup> 8	654 <sup>h</sup> 2	664 <sup>h</sup> 0
667 <sup>h</sup> 2	668 <sup>h</sup> 5	652 <sup>h</sup> 0	686 <sup>h</sup> 0	670 <sup>h</sup> 0	662 <sup>h</sup> 0	661 <sup>h</sup> 0	651 <sup>h</sup> 2	651 <sup>h</sup> 1	656 <sup>h</sup> 2	650 <sup>h</sup> 0	654 <sup>h</sup> 0	663 <sup>h</sup> 8
675 <sup>h</sup> 0	671 <sup>h</sup> 0	650 <sup>h</sup> 0	687 <sup>h</sup> 0	669 <sup>h</sup> 0	661 <sup>h</sup> 0	659 <sup>h</sup> 6	651 <sup>h</sup> 8	650 <sup>h</sup> 5	654 <sup>h</sup> 2	651 <sup>h</sup> 8	654 <sup>h</sup> 0	670 <sup>h</sup> 0
667 <sup>h</sup> 4	668 <sup>h</sup> 5	650 <sup>h</sup> 2	688 <sup>h</sup> 1	666 <sup>h</sup> 1	661 <sup>h</sup> 0	658 <sup>h</sup> 5	652 <sup>h</sup> 8	654 <sup>h</sup> 2	655 <sup>h</sup> 2	655 <sup>h</sup> 0	654 <sup>h</sup> 0	670 <sup>h</sup> 4
667 <sup>h</sup> 8	669 <sup>h</sup> 0	649 <sup>h</sup> 1	681 <sup>h</sup> 0	665 <sup>h</sup> 5	663 <sup>h</sup> 5	658 <sup>h</sup> 0	650 <sup>h</sup> 2	651 <sup>h</sup> 0	652 <sup>h</sup> 5	655 <sup>h</sup> 2	656 <sup>h</sup> 0	666 <sup>h</sup> 8
668 <sup>h</sup> 5	674 <sup>h</sup> 5	666 <sup>h</sup> 5	681 <sup>h</sup> 8	666 <sup>h</sup> 0	663 <sup>h</sup> 0	658 <sup>h</sup> 0	648 <sup>h</sup> 8	652 <sup>h</sup> 2	652 <sup>h</sup> 2	651 <sup>h</sup> 0	659 <sup>h</sup> 0	666 <sup>h</sup> 8
669 <sup>h</sup> 0	671 <sup>h</sup> 0	675 <sup>h</sup> 0	679 <sup>h</sup> 5	663 <sup>h</sup> 6	661 <sup>h</sup> 0	656 <sup>h</sup> 0	647 <sup>h</sup> 8	648 <sup>h</sup> 4	656 <sup>h</sup> 8	648 <sup>h</sup> 0	660 <sup>h</sup> 0	667 <sup>h</sup> 4
669 <sup>h</sup> 0	669 <sup>h</sup> 8	678 <sup>h</sup> 5	676 <sup>h</sup> 0	663 <sup>h</sup> 0	663 <sup>h</sup> 0	637 <sup>h</sup> 0	647 <sup>h</sup> 2	642 <sup>h</sup> 3	658 <sup>h</sup> 0	650 <sup>h</sup> 0	661 <sup>h</sup> 0	667 <sup>h</sup> 0
666 <sup>h</sup> 2	661 <sup>h</sup> 3	678 <sup>h</sup> 0	678 <sup>h</sup> 0	661 <sup>h</sup> 0	663 <sup>h</sup> 0	655 <sup>h</sup> 0	647 <sup>h</sup> 4	645 <sup>h</sup> 2	659 <sup>h</sup> 8	651 <sup>h</sup> 0	664 <sup>h</sup> 0	667 <sup>h</sup> 2
665 <sup>h</sup> 8	660 <sup>h</sup> 0	681 <sup>h</sup> 0	674 <sup>h</sup> 0	663 <sup>h</sup> 0	661 <sup>h</sup> 0	652 <sup>h</sup> 5	647 <sup>h</sup> 2	646 <sup>h</sup> 2	652 <sup>h</sup> 6	650 <sup>h</sup> 5	669 <sup>h</sup> 2	666 <sup>h</sup> 0
666 <sup>h</sup> 6	655 <sup>h</sup> 1	680 <sup>h</sup> 5	672 <sup>h</sup> 0	663 <sup>h</sup> 0	660 <sup>h</sup> 8	653 <sup>h</sup> 0	649 <sup>h</sup> 4	655 <sup>h</sup> 0	651 <sup>h</sup> 5	651 <sup>h</sup> 0	671 <sup>h</sup> 0	662 <sup>h</sup> 2
46 <sup>h</sup> 0	46 <sup>h</sup> 0	46 <sup>h</sup> 3	46 <sup>h</sup> 5	45 <sup>h</sup> 7	46 <sup>h</sup> 0	46 <sup>h</sup> 0	45 <sup>h</sup> 2	45 <sup>h</sup> 5	45 <sup>h</sup> 6	45 <sup>h</sup> 6	45 <sup>h</sup> 3	44 <sup>h</sup> 7

VERTICAL FORCE.

Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1° 64.

247 <sup>h</sup> 1	238 <sup>h</sup> 7	231 <sup>h</sup> 9	223 <sup>h</sup> 9	235 <sup>h</sup> 5	242 <sup>h</sup> 2	246 <sup>h</sup> 6	247 <sup>h</sup> 4	248 <sup>h</sup> 3	248 <sup>h</sup> 5	248 <sup>h</sup> 9	251 <sup>h</sup> 7	251 <sup>h</sup> 6
247 <sup>h</sup> 1	237 <sup>h</sup> 9	231 <sup>h</sup> 7	226 <sup>h</sup> 9	235 <sup>h</sup> 5	242 <sup>h</sup> 2	246 <sup>h</sup> 6	247 <sup>h</sup> 4	248 <sup>h</sup> 3	248 <sup>h</sup> 5	248 <sup>h</sup> 9	251 <sup>h</sup> 7	251 <sup>h</sup> 6
247 <sup>h</sup> 1	237 <sup>h</sup> 9	230 <sup>h</sup> 2	228 <sup>h</sup> 7	235 <sup>h</sup> 5	242 <sup>h</sup> 5	247 <sup>h</sup> 4	247 <sup>h</sup> 4	248 <sup>h</sup> 3	248 <sup>h</sup> 5	248 <sup>h</sup> 9	251 <sup>h</sup> 7	251 <sup>h</sup> 6
247 <sup>h</sup> 3	237 <sup>h</sup> 9	226 <sup>h</sup> 8	230 <sup>h</sup> 6	237 <sup>h</sup> 0	243 <sup>h</sup> 7	247 <sup>h</sup> 4	247 <sup>h</sup> 4	248 <sup>h</sup> 3	248 <sup>h</sup> 5	249 <sup>h</sup> 2	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 3	237 <sup>h</sup> 9	225 <sup>h</sup> 1	231 <sup>h</sup> 7	238 <sup>h</sup> 5	243 <sup>h</sup> 7	247 <sup>h</sup> 4	247 <sup>h</sup> 4	248 <sup>h</sup> 3	248 <sup>h</sup> 0	251 <sup>h</sup> 7	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 3	237 <sup>h</sup> 6	222 <sup>h</sup> 8	231 <sup>h</sup> 7	239 <sup>h</sup> 4	243 <sup>h</sup> 7	247 <sup>h</sup> 4	247 <sup>h</sup> 4	248 <sup>h</sup> 3	248 <sup>h</sup> 0	251 <sup>h</sup> 7	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 3	237 <sup>h</sup> 6	225 <sup>h</sup> 9	232 <sup>h</sup> 0	239 <sup>h</sup> 4	243 <sup>h</sup> 7	247 <sup>h</sup> 4	247 <sup>h</sup> 4	248 <sup>h</sup> 0	249 <sup>h</sup> 0	251 <sup>h</sup> 7	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 1	237 <sup>h</sup> 6	225 <sup>h</sup> 9	232 <sup>h</sup> 2	239 <sup>h</sup> 4	245 <sup>h</sup> 4	247 <sup>h</sup> 4	247 <sup>h</sup> 4	248 <sup>h</sup> 0	249 <sup>h</sup> 0	251 <sup>h</sup> 7	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 1	237 <sup>h</sup> 3	224 <sup>h</sup> 3	232 <sup>h</sup> 2	240 <sup>h</sup> 7	245 <sup>h</sup> 4	247 <sup>h</sup> 4	247 <sup>h</sup> 5	247 <sup>h</sup> 5	249 <sup>h</sup> 6	251 <sup>h</sup> 7	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 1	237 <sup>h</sup> 0	222 <sup>h</sup> 0	233 <sup>h</sup> 6	240 <sup>h</sup> 7	246 <sup>h</sup> 2	247 <sup>h</sup> 4	247 <sup>h</sup> 5	248 <sup>h</sup> 7	249 <sup>h</sup> 6	251 <sup>h</sup> 7	251 <sup>h</sup> 6	251 <sup>h</sup> 6
247 <sup>h</sup> 1	237 <sup>h</sup> 0	222 <sup>h</sup> 0	235 <sup>h</sup> 5	241 <sup>h</sup> 3	246 <sup>h</sup> 2	247 <sup>h</sup> 4	247 <sup>h</sup> 5	248 <sup>h</sup> 0	248 <sup>h</sup> 9	251 <sup>h</sup> 7	252 <sup>h</sup> 7	251 <sup>h</sup> 6
247 <sup>h</sup> 1	235 <sup>h</sup> 2	222 <sup>h</sup> 4	235 <sup>h</sup> 5	242 <sup>h</sup> 2	246 <sup>h</sup> 6	247 <sup>h</sup> 4	247 <sup>h</sup> 6	248 <sup>h</sup> 5	248 <sup>h</sup> 9	251 <sup>h</sup> 7	252 <sup>h</sup> 7	251 <sup>h</sup> 5
46 <sup>h</sup> 6	46 <sup>h</sup> 6	47 <sup>h</sup> 2	47 <sup>h</sup> 3	47 <sup>h</sup> 4	46 <sup>h</sup> 4	46 <sup>h</sup> 0	45 <sup>h</sup> 4	45 <sup>h</sup> 6	45 <sup>h</sup> 6	45 <sup>h</sup> 4	45 <sup>h</sup> 2	44 <sup>h</sup> 8

and increasing Horizontal and Vertical Force.



TORONTO, 1846 to 1848.

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METEOROLOGICAL OBSERVATIONS.

		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Guthrie's Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	1	In. 2'714	In. 2'684	In. 2'674	In. 2'638	In. 2'641	In. 2'619	In. 2'569	In. 2'521	In. 2'489	In. 2'469	In. 2'449	In. 2'367
	2	1'929	1'907	1'866	1'872	1'861	1'865	1'855	1'833	1'829	1'835	1'845	1'858
	3	2'311	2'356	2'388	2'416	2'443	2'439	2'427	2'421	2'421	2'407	2'427	2'441
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	2'694	2'716	2'732	2'748	2'791	2'797	2'801	2'798	2'806	2'832	2'847	2'855
	6	3'002	3'016	3'021	3'032	3'055	3'034	2'983	2'953	2'919	2'911	2'895	2'861
	7	2'370	2'360	2'330	2'304	2'300	2'275	2'227	2'245	2'201	2'200	2'186	2'211
	8	2'393	2'415	2'425	2'453	2'447	2'451	2'447	2'451	2'462	2'478	2'493	2'511
	9	2'562	2'547	2'556	2'584	2'591	2'590	2'572	2'561	2'555	2'555	2'551	2'541
	10	2'470	2'470	2'465	2'451	2'443	2'444	2'438	2'438	2'428	2'428	2'428	2'427
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	2'329	2'339	2'351	2'375	2'393	2'401	2'401	2'400	2'416	2'448	2'461	2'491
	13	2'765	2'786	2'824	2'840	2'856	2'844	2'825	2'812	2'819	2'818	2'818	2'818
	14	2'566	2'562	2'558	2'561	2'587	2'582	2'567	2'576	2'590	2'615	2'625	2'643
	15	2'636	2'646	2'641	2'646	2'626	2'591	2'558	2'535	2'527	2'509	2'504	2'506
	16	2'486	2'482	2'488	2'511	2'516	2'492	2'472	2'468	2'468	2'470	2'466	2'480
	17	2'536	2'547	2'572	2'580	2'583	2'577	2'557	2'555	2'558	2'580	2'612	2'647
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	3'121	3'116	3'137	3'171	3'173	3'167	3'157	3'143	3'152	3'156	3'133	3'157
	20	3'073	3'073	3'061	3'078	3'057	3'008	2'982	2'922	2'899	2'893	2'878	2'888
	21	2'498	2'506	2'531	2'537	2'532	2'512	2'490	2'481	2'494	2'525	2'545	2'554
	22	3'078	3'120	3'144	3'151	3'161	3'167	3'157	3'135	3'147	3'181	3'193	3'212
	23	3'293	3'319	3'335	3'345	3'347	3'303	3'268	3'234	3'200	3'181	3'151	3'153
	24	2'897	2'891	2'867	2'871	2'835	2'816	2'766	2'700	2'648	2'618	2'592	2'560
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	2'340	2'322	2'322	2'320	2'319	2'281	2'273	2'240	2'238	2'246	2'266	2'298
	27	2'648	2'638	2'670	2'701	2'718	2'721	2'714	2'702	2'678	2'664	2'663	2'665
	28	2'571	2'583	2'609	2'631	2'659	2'658	2'660	2'655	2'643	2'658	2'676	2'690
	29	2'675	2'679	2'671	2'668	2'656	2'633	2'598	2'552	2'556	2'546	2'506	2'508
	30	2'268	2'262	2'270	2'242	2'231	2'225	2'225	2'225	2'215	2'201	2'201	2'201
	31	2'540	2'590	2'656	2'692	2'739	2'766	2'778	2'776	2'794	2'824	2'861	2'901
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	2'6199	2'6274	2'6360	2'6451	2'6487	2'6382	2'6185	2'5992	2'5934	2'5960	2'5914	2'6009	
FEBRUARY.	2	2'910	2'907	2'913	2'913	2'910	2'902	2'882	2'877	2'840	2'822	2'807	2'798
	3	2'586	2'578	2'602	2'616	2'626	2'621	2'587	2'568	2'559	2'550	2'563	2'557
	4	2'772	2'788	2'808	2'817	2'814	2'798	2'752	2'700	2'650	2'606	2'565	2'556
	5	2'375	2'411	2'431	2'481	2'512	2'526	2'546	2'558	2'581	2'615	2'635	2'659
	6	2'787	2'806	2'806	2'810	2'820	2'812	2'786	2'725	2'701	2'673	2'657	2'643
	7	2'269	2'251	2'243	2'202	2'176	2'145	2'110	2'074	2'039	2'031	2'029	2'029
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	2'600	2'632	2'684	2'722	2'753	2'771	2'791	2'797	2'789	2'797	2'810	2'839
	10	2'851	2'835	2'816	2'823	2'817	2'798	2'754	2'687	2'659	2'621	2'592	2'591
	11	2'430	2'409	2'415	2'412	2'412	2'427	2'417	2'421	2'422	2'433	2'454	2'462
	12	2'818	2'857	2'877	2'897	2'913	2'920	2'910	2'900	2'894	2'891	2'894	2'902
	13	2'851	2'865	2'895	2'892	2'880	2'877	2'861	2'840	2'814	2'795	2'805	2'789
	14	2'710	2'729	2'727	2'714	2'710	2'692	2'650	2'609	2'586	2'592	2'572	2'553
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	2'555	2'560	2'566	2'548	2'528	2'522	2'496	2'478	2'472	2'468	2'482	2'490
	17	2'648	2'680	2'684	2'713	2'712	2'732	2'729	2'732	2'730	2'732	2'741	2'754
	18	2'911	2'923	2'946	2'964	2'969	2'983	2'988	2'968	2'957	2'965	2'965	2'965
	19	2'909	2'890	2'895	2'859	2'829	2'791	2'758	2'755	2'727	2'682	2'632	2'611
	20	2'408	2'085	2'069	2'039	2'009	1'991	1'966	1'959	1'940	1'929	1'919	1'917
	21	1'961	1'983	1'993	2'023	2'047	2'070	2'070	2'052	2'052	2'066	2'094	2'122
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	2'436	2'448	2'450	2'448	2'440	2'438	2'424	2'406	2'395	2'405	2'376	2'359
	24	2'613	2'637	2'677	2'695	2'692	2'696	2'684	2'691	2'705	2'722	2'748	2'772
	25	2'878	2'900	2'909	2'915	2'935	2'907	2'900	2'888	2'875	2'876	2'875	2'885
	26	3'122	3'143	3'182	3'202	3'217	3'231	3'226	3'214	3'198	3'198	3'200	3'208
	27	3'219	3'218	3'220	3'211	3'192	3'168	3'143	3'097	3'078	3'046	3'009	3'008
	28	2'727	2'727	2'710	2'720	2'724	2'714	2'708	2'695	2'692	2'694	2'702	2'719
	March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6687	2'6776	2'6895	2'6933	2'6932	2'6888	2'6724	2'6536	2'6399	2'6341	2'6307	2'6302	

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
169	2'419	2'367	2'342	2'318	2'280	2'256	2'229	2'175	2'145	2'108	2'082	2'038	2'006	1'957	2'3642
85	1'845	1'858	1'886	1'934	1'976	2'010	2'042	2'063	2'132	2'162	2'205	2'235	2'256	2'281	1'9821
107	2'427	2'411	2'453	2'465	2'479	2'475	2'477	2'481	—	—	—	—	—	—	2'4816
832	2'815	2'875	2'863	2'875	2'903	2'920	2'931	2'953	2'959	2'956	2'965	2'968	2'978	2'976	2'8612
111	2'895	2'861	2'853	2'829	2'789	2'761	2'733	2'614	2'606	2'566	2'532	2'483	2'439	2'391	2'8039
200	2'186	2'211	2'226	2'236	2'249	2'265	2'274	2'286	2'300	2'314	2'342	2'369	2'373	2'377	2'2830
178	2'493	2'541	2'537	2'561	2'569	2'569	2'573	2'573	2'565	2'551	2'551	2'551	2'556	2'550	2'5057
555	2'551	2'541	2'551	2'567	2'567	2'575	2'563	2'563	2'551	2'535	2'529	2'521	2'501	2'473	2'5529
278	2'232	2'267	2'258	2'246	2'246	2'232	2'218	2'201	—	—	—	—	—	—	2'3184
438	2'461	2'491	2'526	2'548	2'566	2'597	2'627	2'645	2'627	2'684	2'706	2'714	2'743	2'746	2'5233
418	2'818	2'818	2'818	2'796	2'778	2'754	2'738	2'726	2'693	2'652	2'652	2'628	2'602	2'576	2'7599
315	2'625	2'653	2'639	2'654	2'648	2'631	2'636	2'634	2'635	2'614	2'654	2'646	2'642	2'635	2'6133
709	2'501	2'506	2'516	2'516	2'528	2'548	2'552	2'548	2'520	2'512	2'528	2'517	2'497	2'490	2'5500
170	2'466	2'480	2'481	2'481	2'482	2'484	2'486	2'495	2'491	2'492	2'513	2'528	2'520	2'519	2'4906
580	2'612	2'617	2'684	2'708	2'733	2'752	2'772	2'784	—	—	—	—	—	—	2'7387
156	3'133	3'157	3'151	3'141	3'141	3'143	3'148	3'132	3'026	3'031	3'072	3'080	3'095	3'096	3'1323
893	2'878	2'848	2'825	2'781	2'759	2'733	2'692	2'685	2'649	2'635	2'596	2'570	2'536	2'508	2'8224
125	2'545	2'551	2'568	2'616	2'639	2'660	2'712	2'755	2'812	2'839	2'928	2'967	2'993	3'039	2'6586
84	3'193	3'212	3'239	3'211	3'213	3'257	3'269	3'281	3'284	3'294	3'300	3'301	3'291	3'287	3'2112
181	3'151	3'153	3'147	3'134	3'193	3'067	3'011	3'031	3'023	2'999	2'975	2'951	2'936	2'928	3'1423
318	2'592	2'590	2'553	2'533	2'516	2'495	2'461	2'433	—	—	—	—	—	—	2'6083
246	2'296	2'298	2'332	2'357	2'376	2'400	2'420	2'449	2'446	2'466	2'497	2'519	2'543	2'581	2'3696
361	2'693	2'665	2'640	2'628	2'600	2'576	2'526	2'520	2'508	2'520	2'522	2'527	2'523	2'511	2'6157
358	2'676	2'690	2'698	2'712	2'712	2'726	2'729	2'716	2'715	2'713	2'716	2'720	2'711	2'684	2'6766
446	2'506	2'508	2'501	2'482	2'470	2'430	2'409	2'396	2'368	2'347	2'319	2'321	2'313	2'279	2'4965
201	2'204	2'220	2'183	2'183	2'183	2'226	2'230	2'236	2'257	2'310	2'371	2'421	2'456	2'501	2'2631
824	2'861	2'961	2'928	2'919	2'953	2'989	2'989	2'980	—	—	—	—	—	—	2'8366
990	2'5911	2'6000	2'6087	2'6108	2'6112	2'6135	2'6101	2'6082	2'6175	2'6160	2'6250	2'6284	2'6261	2'6206	2'6172
22	2'807	2'798	2'788	2'777	2'751	2'708	2'692	2'675	2'655	2'651	2'647	2'631	2'619	2'603	2'7782
60	2'563	2'557	2'559	2'601	2'611	2'617	2'627	2'661	2'667	2'701	2'723	2'735	2'739	2'762	2'6270
106	2'565	2'556	2'520	2'481	2'453	2'390	2'378	2'368	2'356	2'339	2'339	2'310	2'310	2'364	2'5538
115	2'615	2'679	2'700	2'727	2'739	2'745	2'761	2'769	2'767	2'767	2'772	2'775	2'773	2'786	2'6436
73	2'657	2'613	2'599	2'581	2'562	2'556	2'516	2'456	2'444	2'392	2'366	2'330	2'281	2'281	2'5985
31	2'029	2'029	2'062	2'109	2'135	2'211	2'254	2'282	—	—	—	—	—	—	2'2428
97	2'810	2'849	2'832	2'870	2'882	2'862	2'860	2'872	2'872	2'878	2'880	2'876	2'880	2'873	2'8091
21	2'592	2'591	2'585	2'583	2'571	2'544	2'514	2'508	2'489	2'475	2'458	2'448	2'423	2'430	2'6197
33	2'454	2'462	2'502	2'551	2'605	2'645	2'673	2'703	2'721	2'737	2'744	2'772	2'792	2'804	2'5568
91	2'891	2'902	2'918	2'918	2'920	2'923	2'919	2'915	2'892	2'868	2'878	2'868	2'856	2'852	2'8917
95	2'805	2'789	2'799	2'818	2'816	2'809	2'813	2'800	2'790	2'782	2'787	2'785	2'755	2'716	2'8178
92	2'572	2'563	2'468	2'432	2'362	2'390	2'376	2'340	—	—	—	—	—	—	2'5922
68	2'482	2'499	2'512	2'530	2'543	2'548	2'551	2'551	2'551	2'559	2'553	2'553	2'560	2'555	2'5622
32	2'741	2'754	2'776	2'790	2'808	2'813	2'827	2'828	2'836	2'846	2'852	2'868	2'878	2'901	2'5388
65	2'965	2'955	2'955	2'981	2'981	2'971	2'964	2'960	2'961	2'928	2'933	2'914	2'914	2'904	2'9525
82	2'632	2'611	2'579	2'564	2'557	2'486	2'446	2'410	2'370	2'334	2'288	2'270	2'209	2'139	2'5827
29	1'919	1'917	1'917	1'926	1'921	1'929	1'934	1'936	1'934	1'936	1'942	1'910	1'912	1'946	1'9640
66	2'091	2'122	2'155	2'185	2'193	2'214	2'210	2'206	—	—	—	—	—	—	2'1800
15	2'376	2'379	2'368	2'388	2'470	2'516	2'531	2'531	2'548	2'550	2'566	2'582	2'590	2'594	2'4687
22	2'748	2'772	2'818	2'849	2'857	2'865	2'891	2'888	2'886	2'894	2'894	2'884	2'871	2'868	2'7832
76	2'875	2'885	2'897	2'922	2'943	2'960	2'981	2'969	3'011	3'043	3'057	3'077	3'083	3'112	2'9512
18	3'200	3'208	3'208	3'234	3'245	3'251	3'255	3'251	3'238	3'233	3'231	3'234	3'237	3'220	3'2157
96	3'009	3'008	2'997	2'971	2'909	2'903	2'883	2'851	2'827	2'801	2'789	2'785	2'757	2'731	2'9922
71	2'702	2'719	2'724	2'746	2'762	2'784	2'796	2'812	—	—	—	—	—	—	2'7815
411	2'6307	2'6302	2'6353	2'6474	2'6498	2'6517	2'6522	2'6488	2'6771	2'6739	2'6737	2'6729	2'6658	2'6665	2'6620



BAROMETRIC PRESSURE.												
Barometer at 32° = 27 English inches + the numbers in the Table.												
Hour of Mean Time	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean French Time	18	19	20	21	22	23	0	1	2	3	4	5
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
MARCH	2	27972	27972	27985	27990	27995	27999	27999	27999	27999	27999	27999
	3	27973	27980	27988	27993	27998	27999	27999	27999	27999	27999	27999
	4	27974	27981	27989	27994	27999	27999	27999	27999	27999	27999	27999
	5	27975	27982	27990	27995	27999	27999	27999	27999	27999	27999	27999
	6	27976	27983	27991	27996	27999	27999	27999	27999	27999	27999	27999
	7	27977	27984	27992	27997	27999	27999	27999	27999	27999	27999	27999
	8	27978	27985	27993	27998	27999	27999	27999	27999	27999	27999	27999
	9	27979	27986	27994	27999	27999	27999	27999	27999	27999	27999	27999
	10	27980	27987	27995	28000	28000	28000	28000	28000	28000	28000	28000
	11	27981	27988	27996	28001	28001	28001	28001	28001	28001	28001	28001
	12	27982	27989	27997	28002	28002	28002	28002	28002	28002	28002	28002
	13	27983	27990	27998	28003	28003	28003	28003	28003	28003	28003	28003
	14	27984	27991	27999	28004	28004	28004	28004	28004	28004	28004	28004
	15	27985	27992	28000	28005	28005	28005	28005	28005	28005	28005	28005
	16	27986	27993	28001	28006	28006	28006	28006	28006	28006	28006	28006
	17	27987	27994	28002	28007	28007	28007	28007	28007	28007	28007	28007
	18	27988	27995	28003	28008	28008	28008	28008	28008	28008	28008	28008
	19	27989	27996	28004	28009	28009	28009	28009	28009	28009	28009	28009
	20	27990	27997	28005	28010	28010	28010	28010	28010	28010	28010	28010
	21	27991	27998	28006	28011	28011	28011	28011	28011	28011	28011	28011
	22	27992	27999	28007	28012	28012	28012	28012	28012	28012	28012	28012
	23	27993	28000	28008	28013	28013	28013	28013	28013	28013	28013	28013
	24	27994	28001	28009	28014	28014	28014	28014	28014	28014	28014	28014
	25	27995	28002	28010	28015	28015	28015	28015	28015	28015	28015	28015
	26	27996	28003	28011	28016	28016	28016	28016	28016	28016	28016	28016
	27	27997	28004	28012	28017	28017	28017	28017	28017	28017	28017	28017
	28	27998	28005	28013	28018	28018	28018	28018	28018	28018	28018	28018
	29	27999	28006	28014	28019	28019	28019	28019	28019	28019	28019	28019
	30	28000	28007	28015	28020	28020	28020	28020	28020	28020	28020	28020
Hourly Means		27997	27997	27997	27997	27997	27997	27997	27997	27997	27997	27997
MARCH	1	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	2	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	3	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	4	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	5	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	6	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	7	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	8	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	9	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	10	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	11	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	12	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	13	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	14	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	15	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	16	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	17	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	18	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	19	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	20	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	21	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	22	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	23	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	24	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	25	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	26	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	27	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	28	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	29	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
	30	27915	27916	27917	27918	27919	27918	27917	27916	27915	27914	27913
Hourly Means		27915	27915	27915	27915	27915	27915	27915	27915	27915	27915	27915

\* Good Friday.

BAROMETRIC PRESSURE.

Barometer at 42° = 27 English inches + the numbers in the Table.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
3'028	3'047	3'063	3'064	3'054	3'062	3'054	3'055	3'045	3'047	3'050	3'056	3'0267
2'996	2'992	2'918	2'899	2'882	2'858	2'840	2'858	2'830	2'821	2'793	2'763	2'5655
2'416	2'428	2'426	2'442	2'450	2'468	2'476	2'474	2'482	2'486	2'486	2'534	2'5395
2'568	2'566	2'583	2'577	2'563	2'581	2'573	2'578	2'578	2'547	2'523	2'515	2'5038
2'696	2'641	2'654	2'674	2'704	2'695	2'700	2'700	2'692	2'687	2'710	2'681	2'5999
2'400	2'480	2'480	2'470	2'459	2'454	—	—	—	—	—	—	—
—	—	—	—	—	—	2'730	2'756	2'763	2'771	2'781	2'795	2'6067
2'830	2'850	2'856	2'841	2'842	2'842	2'828	2'829	2'826	2'830	2'844	—	2'8584
2'876	2'872	2'877	2'895	2'902	2'892	2'889	2'880	2'871	2'866	2'865	2'850	2'8886
2'747	2'747	2'736	2'722	2'719	2'710	2'702	2'700	2'692	2'677	2'673	2'665	2'7616
2'543	2'537	2'523	2'524	2'514	2'470	2'448	2'438	2'434	2'403	2'391	2'371	2'5479
2'414	2'449	2'421	2'415	2'417	2'417	2'033	2'090	2'090	2'060	2'060	2'074	2'1879
2'006	2'113	2'122	2'118	2'115	2'048	—	—	—	—	—	—	—
—	—	—	—	—	—	2'268	2'284	2'296	2'291	2'305	2'311	2'1329
2'557	2'619	2'611	2'602	2'609	2'609	2'605	2'666	2'672	2'678	2'695	2'718	2'5675
2'835	2'803	2'805	2'848	2'846	2'824	2'849	2'848	2'780	2'780	2'770	2'802	2'7996
2'750	2'735	2'736	2'716	2'745	2'720	2'722	2'715	2'690	2'681	2'675	2'691	2'7658
2'610	2'624	2'613	2'611	2'646	2'641	2'635	2'647	2'644	2'637	2'611	2'681	2'6360
2'576	2'580	2'602	2'607	2'634	2'649	2'665	2'692	2'705	2'725	2'747	2'767	2'6493
2'910	2'960	2'983	3'001	3'004	3'036	—	—	—	—	—	—	—
—	—	—	—	—	—	2'875	2'849	2'823	2'795	2'785	2'752	2'8961
2'520	2'527	2'518	2'518	2'492	2'466	2'440	2'418	2'422	2'406	2'403	2'409	2'5589
2'345	2'289	2'270	2'242	2'210	2'193	2'145	2'131	2'131	2'075	2'051	2'021	2'2934
2'612	2'646	2'655	2'682	2'610	2'609	2'416	2'410	2'411	2'401	2'401	2'401	2'0240
2'418	2'440	2'453	2'448	2'442	2'442	2'442	2'462	2'458	2'452	2'456	2'461	2'1207
2'517	2'519	2'551	2'563	2'574	2'577	2'581	2'598	2'442	2'400	2'382	2'375	2'2980
2'410	2'455	2'483	2'495	2'495	2'501	—	—	—	—	—	—	—
—	—	—	—	—	—	2'740	2'766	2'779	2'783	2'796	2'808	2'5186
2'849	2'849	2'870	2'878	2'885	2'909	2'906	2'936	2'906	2'908	2'922	2'922	2'8705
2'985	3'004	3'027	3'049	3'059	3'057	3'061	3'066	3'066	3'074	3'086	3'117	3'0114
—	—	—	—	—	—	—	—	—	—	—	—	—
2'521	2'585	2'598	2'598	2'597	2'596	2'6120	2'6157	2'6111	2'6032	2'6031	2'5986	2'6026
—	—	—	—	—	—	—	—	—	—	—	—	—
3'120	3'142	3'123	3'114	3'117	3'111	3'113	3'117	3'116	3'120	3'126	3'139	3'1387
3'040	3'080	3'080	3'102	3'106	3'102	3'103	3'122	3'119	3'124	3'132	3'138	3'1249
3'100	3'095	3'100	3'086	3'067	3'068	3'073	3'074	3'090	3'078	3'064	3'058	3'1169
3'048	3'043	3'044	3'092	2'987	2'991	—	—	—	—	—	—	—
—	—	—	—	—	—	3'070	3'070	3'069	3'069	3'063	3'121	3'0595
3'044	2'997	2'989	2'972	2'943	2'895	2'853	2'805	2'781	2'767	2'755	2'752	3'0071
2'949	2'906	2'911	2'909	2'943	2'963	2'995	2'940	2'956	2'999	2'717	2'766	2'6185
2'886	2'898	2'914	2'913	2'968	2'980	3'008	3'016	3'019	3'025	3'027	3'036	2'9180
2'878	2'842	2'837	2'826	2'800	2'779	—	—	—	—	—	—	—
—	—	—	—	—	—	2'349	2'283	2'221	2'211	2'194	2'187	2'7630
—	—	—	—	—	—	—	—	—	—	—	—	—
2'464	2'516	2'553	2'547	2'527	2'529	—	—	—	—	—	—	—
—	—	—	—	—	—	2'395	2'379	2'377	2'367	2'331	2'327	2'3222
2'569	2'588	2'608	2'636	2'636	2'636	2'646	2'651	2'661	2'662	2'656	2'650	2'5355
2'518	2'516	2'524	2'510	2'488	2'488	2'512	2'548	2'574	2'627	2'681	2'718	2'5742
2'944	2'944	2'972	2'978	2'977	2'975	2'977	—	2'973	2'970	2'978	2'959	2'9356
2'765	2'755	2'781	2'768	2'786	2'780	2'758	2'744	—	2'695	2'695	2'699	2'8293
2'677	2'555	2'549	2'539	2'541	2'530	2'520	2'519	2'505	2'499	2'501	2'561	2'5984
2'556	2'566	2'568	2'559	2'565	2'569	—	—	—	—	—	—	—
—	—	—	—	—	—	3'004	2'991	3'005	2'988	2'999	3'001	2'6973
2'775	2'750	2'744	2'744	2'738	2'736	2'736	2'721	2'715	2'703	2'689	2'681	2'8178
2'662	2'692	2'700	2'734	2'735	2'725	2'733	2'743	2'752	2'747	2'745	2'762	2'6699
2'672	2'668	2'680	2'668	2'656	2'644	2'645	2'645	2'652	2'648	2'653	2'651	2'7104
2'506	2'504	2'499	2'489	2'471	2'449	2'437	2'420	2'412	2'420	2'406	2'394	2'5309
2'363	2'366	2'448	2'428	2'442	2'441	2'445	2'451	2'455	2'459	2'497	2'535	2'4148
2'572	2'585	2'590	2'603	2'589	2'587	—	—	—	—	—	—	—
—	—	—	—	—	—	2'597	2'584	2'586	2'587	2'603	2'612	2'5973
2'510	2'550	2'574	2'561	2'562	2'546	2'549	2'546	2'545	2'551	2'539	2'533	2'5856
2'369	2'361	2'378	2'364	2'357	2'382	2'385	2'347	2'335	2'343	2'287	2'297	2'4128
2'277	2'265	2'285	2'275	2'263	2'255	2'255	2'283	2'291	2'283	2'285	2'297	2'2797
2'260	2'282	2'297	2'306	2'317	2'323	2'325	2'293	2'291	2'290	2'284	2'294	2'2929
—	—	—	—	—	—	—	—	—	—	—	—	—
2'6796	2'6818	2'6914	2'6901	2'6868	2'6835	2'6821	2'6660	2'6750	2'6761	2'6773	2'6867	2'7017

		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	1	In. 2'310	In. 2'314	In. 2'319	In. 2'327	In. 2'317	In. 2'301	In. 2'300	In. 2'294	In. 2'280	In. 2'286	In. 2'290	In. 2'294
	2	2'340	2'348	2'350	2'350	2'349	2'359	2'365	2'381	2'382	2'384	2'408	2'418
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	2'696	2'720	2'718	2'741	2'725	2'720	2'713	2'683	2'666	2'659	2'641	2'636
	5	2'645	2'653	2'635	2'627	2'629	2'638	2'624	2'634	2'614	2'589	2'585	2'570
	6	2'578	2'594	2'600	2'630	2'637	2'659	2'659	2'616	2'644	2'624	2'622	2'615
	7	2'615	2'624	2'628	2'622	2'636	2'625	2'620	2'601	2'601	2'583	2'582	2'578
	8	2'612	2'620	2'634	2'629	2'626	2'623	2'612	2'618	2'592	2'582	2'579	2'579
	9	2'429	2'429	2'413	2'385	2'375	2'357	2'343	2'294	2'270	2'252	2'241	2'224
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	2'404	2'433	2'455	2'464	2'465	2'450	2'442	2'436	2'423	2'409	2'408	2'409
	12	2'397	2'400	2'404	2'402	2'400	2'401	2'403	2'405	2'414	2'407	2'410	2'417
	13	2'379	2'353	2'347	2'339	2'329	2'310	2'290	2'269	2'267	2'264	2'292	2'317
	14	2'410	2'406	2'428	2'419	2'413	2'388	2'356	2'396	2'380	2'323	2'321	2'289
	15	2'359	2'383	2'461	2'492	2'554	2'600	2'627	2'615	2'668	2'680	2'681	2'701
	16	2'819	2'825	2'823	2'819	2'808	2'826	2'810	2'802	2'787	2'794	2'789	2'790
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	2'605	2'602	2'643	2'664	2'677	2'693	2'712	2'725	2'735	2'742	2'765	2'781
	19	2'840	2'853	2'862	2'848	2'834	2'803	2'781	2'749	2'721	2'687	2'652	2'617
	20	2'508	2'491	2'483	2'452	2'432	2'420	2'396	2'419	2'401	2'401	2'402	2'415
	21	2'740	2'762	2'775	2'791	2'796	2'818	2'820	2'782	2'780	2'789	2'763	2'760
	22	2'836	2'844	2'841	2'836	2'834	2'815	2'797	2'790	2'786	2'757	2'749	2'736
	23	2'557	2'553	2'542	2'545	2'544	2'543	2'541	2'538	2'530	2'561	2'578	2'578
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	2'644	2'645	2'650	2'643	2'642	2'648	2'638	2'621	2'616	2'616	2'610	2'612
	26	2'551	2'551	2'552	2'548	2'539	2'514	2'501	2'480	2'476	2'439	2'440	2'442
	27	2'275	2'282	2'265	2'270	2'271	2'268	2'279	2'283	2'276	2'284	2'283	2'288
	28	2'291	2'291	2'289	2'273	2'268	2'260	2'258	2'251	2'245	2'225	2'217	2'207
	29	2'330	2'325	2'325	2'323	2'324	2'318	2'314	2'308	2'283	2'271	2'275	2'265
	30	2'207	2'213	2'215	2'225	2'225	2'221	2'210	2'207	2'201	2'195	2'201	2'201
	31	—	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	2'5145	2'5200	2'5253	2'5252	2'5250	2'5222	2'5155	2'5100	2'5018	2'4924	2'4914	2'4919
JUNE.	1	2'483	2'492	2'465	2'461	2'425	2'449	2'441	2'420	2'382	2'390	2'366	2'365
	2	2'370	2'370	2'309	2'427	2'415	2'408	2'401	2'355	2'367	2'357	2'355	2'364
	3	2'517	2'511	2'531	2'518	2'528	2'474	2'477	2'461	2'457	2'433	2'418	2'394
	4	2'432	2'428	2'446	2'420	2'409	2'399	2'376	2'357	2'323	2'313	2'307	2'288
	5	2'319	2'325	2'340	2'344	2'351	2'335	2'325	2'335	2'338	2'342	2'366	2'357
	6	2'480	2'486	2'501	2'512	2'532	2'541	2'549	2'559	2'579	2'592	2'591	2'586
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	2'932	2'952	2'958	2'971	2'990	2'982	2'981	2'971	2'962	2'955	2'948	2'936
	9	3'015	3'037	3'041	3'011	3'041	3'041	3'023	3'006	2'978	2'951	2'926	2'897
	10	2'782	2'782	2'772	2'756	2'726	2'715	2'685	2'662	2'621	2'605	2'591	2'566
	11	2'547	2'563	2'583	2'585	2'590	2'605	2'620	2'621	2'609	2'585	2'593	2'566
	12	2'859	2'867	2'880	2'904	2'914	2'908	2'899	2'903	2'899	2'899	2'881	2'871
	13	2'867	2'873	2'872	2'866	2'877	2'874	2'869	2'849	2'835	2'818	2'804	2'778
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	2'552	2'558	2'560	2'561	2'545	2'544	2'531	2'522	2'517	2'507	2'503	2'496
	16	2'628	2'643	2'648	2'649	2'648	2'660	2'660	2'658	2'650	2'637	2'637	2'613
	17	2'638	2'649	2'654	2'654	2'661	2'650	2'643	2'630	2'616	2'603	2'601	2'591
	18	2'373	2'376	2'360	2'351	2'350	2'336	2'303	2'285	2'265	2'265	2'241	2'202
	19	2'333	2'335	2'327	2'317	2'309	2'275	2'271	2'256	2'248	2'241	2'248	2'252
	20	2'376	2'376	2'392	2'401	2'417	2'420	2'426	2'443	2'451	2'469	2'478	2'485
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	2'683	2'681	2'685	2'681	2'683	2'688	2'681	2'680	2'695	2'708	2'723	2'751
	23	2'825	2'836	2'826	2'821	2'807	2'792	2'775	2'775	2'769	2'756	2'755	2'753
	24	2'804	2'818	2'821	2'823	2'821	2'812	2'801	2'796	2'770	2'755	2'739	2'719
	25	2'723	2'730	2'722	2'710	2'704	2'693	2'674	2'658	2'647	2'643	2'635	2'626
	26	2'598	2'598	2'582	2'566	2'560	2'555	2'550	2'547	2'532	2'511	2'506	2'497
	27	2'501	2'515	2'517	2'517	2'519	2'516	2'515	2'525	2'512	2'502	2'508	2'506
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	2'551	2'553	2'553	2'559	2'557	2'561	2'556	2'546	2'522	2'509	2'519	2'507
	30	2'517	2'522	2'521	2'529	2'539	2'542	2'542	2'528	2'522	2'511	2'506	2'489
	Hourly Means	2'6129	2'6191	2'6220	2'6209	2'6199	2'6144	2'6063	2'5988	2'5872	2'5791	2'5747	2'5645

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'286	2'290	2'294	2'300	2'304	2'304	2'308	2'326	2'320	2'308	2'298	2'302	2'302	2'304	2'316	2'3052
2'384	2'408	2'418	2'426	2'446	—	—	—	—	2'636	2'637	2'611	2'617	2'661	2'680	2'4631
2'659	2'611	2'636	2'655	2'635	2'643	2'614	2'611	2'608	2'614	2'625	2'620	2'622	2'616	2'615	2'6632
2'589	2'585	2'570	2'549	2'547	2'559	2'561	2'530	2'539	2'527	2'511	2'510	2'514	2'534	2'564	2'5788
2'624	2'622	2'614	2'617	2'612	2'612	2'628	2'630	2'633	2'623	2'612	2'599	2'592	2'601	2'598	2'6191
2'583	2'582	2'588	2'586	2'587	2'587	2'589	2'589	2'597	2'596	2'590	2'586	2'582	2'586	2'584	2'5993
2'582	2'579	2'570	2'517	2'511	2'513	2'532	2'534	2'523	2'497	2'476	2'461	2'461	2'441	2'421	2'5545
2'252	2'244	2'224	2'208	2'214	2'210	2'202	2'189	2'177	—	—	—	—	—	—	2'3089
2'409	2'408	2'409	2'407	2'407	2'418	2'402	2'393	2'383	2'362	2'362	2'363	2'374	2'376	2'382	2'4076
2'407	2'410	2'409	2'406	2'410	2'442	2'466	2'451	2'446	2'444	2'422	2'414	2'403	2'392	2'386	2'4168
2'261	2'292	2'307	2'325	2'337	2'339	2'349	2'371	2'373	2'370	2'380	2'380	2'382	2'386	2'396	2'3293
2'323	2'324	2'289	2'283	2'303	2'319	2'323	2'332	2'356	2'366	2'349	2'357	2'337	2'329	2'322	2'3544
2'680	2'681	2'701	2'728	2'742	2'745	2'759	2'741	2'767	2'784	2'776	2'777	2'771	2'772	2'815	2'6681
2'794	2'789	2'790	2'786	2'786	2'798	2'801	2'805	2'791	—	—	—	—	—	—	2'7538
2'742	2'765	2'781	2'782	2'782	2'793	2'799	2'818	2'820	2'827	2'816	2'809	2'801	2'811	2'821	2'7511
2'687	2'632	2'647	2'631	2'629	2'627	2'618	2'556	2'552	2'567	2'551	2'538	2'517	2'507	2'511	2'6703
2'401	2'402	2'415	2'406	2'408	2'499	2'515	2'524	2'540	2'551	2'587	2'620	2'655	2'681	2'707	2'5002
2'789	2'763	2'760	2'754	2'758	2'768	2'776	2'765	2'763	2'776	2'778	2'778	2'779	2'783	2'821	2'7782
2'737	2'749	2'759	2'724	2'691	2'680	2'682	2'655	2'638	2'638	2'636	2'624	2'587	2'593	2'565	2'7223
2'561	2'578	2'578	2'596	2'611	2'628	2'642	2'644	2'644	—	—	—	—	—	—	2'5866
2'616	2'610	2'612	2'600	2'595	2'582	2'578	2'578	2'571	2'567	2'570	2'558	2'546	2'536	2'561	2'6013
2'439	2'440	2'442	2'442	2'443	2'383	2'361	2'344	2'330	2'314	2'298	2'291	2'288	2'269	2'273	2'4197
2'284	2'283	2'278	2'278	2'289	2'301	2'305	2'306	2'311	2'297	2'288	2'288	2'290	2'281	2'290	2'2850
2'225	2'217	2'207	2'232	2'236	2'261	2'267	2'275	2'288	2'260	2'290	2'294	2'300	2'299	2'320	2'2657
2'274	2'275	2'264	2'255	2'262	2'252	2'258	2'240	2'247	2'262	2'241	2'203	2'199	2'201	2'192	2'2222
2'195	2'201	2'201	2'211	2'237	2'241	2'285	2'309	2'317	—	—	—	—	—	—	2'2992
2'4924	2'4914	2'4913	2'4910	2'4964	2'5000	2'5056	2'5013	2'5048	2'5106	2'5058	2'5027	2'4998	2'5000	2'5114	2'5067
2'390	2'366	2'364	2'368	2'342	2'339	2'347	2'339	2'339	2'346	2'338	2'340	2'340	2'353	2'358	2'3847
2'457	2'455	2'457	2'455	2'400	2'412	2'469	2'463	2'471	2'482	2'474	2'482	2'485	2'485	2'517	2'4224
2'433	2'418	2'406	2'409	2'395	2'391	2'417	2'409	2'419	2'443	2'446	2'439	2'434	2'431	2'438	2'4543
2'313	2'307	2'283	2'295	2'295	2'304	2'328	2'323	2'345	2'343	2'300	2'298	2'292	2'309	2'321	2'3114
2'342	2'366	2'367	2'342	2'355	2'412	2'407	2'415	2'424	2'426	2'427	2'438	2'437	2'445	2'459	2'3810
2'592	2'594	2'586	2'616	2'625	2'653	2'675	2'687	2'694	—	—	—	—	—	—	2'6507
2'955	2'948	2'949	2'951	2'953	2'959	2'970	2'982	2'987	2'996	2'987	2'988	2'991	2'991	3'027	2'9722
2'951	2'926	2'887	2'881	2'874	2'861	2'857	2'836	2'825	2'812	2'825	2'817	2'806	2'793	2'786	2'9169
2'605	2'591	2'567	2'531	2'558	2'521	2'544	2'554	2'545	2'545	2'524	2'528	2'531	2'534	2'543	2'6124
2'585	2'563	2'556	2'565	2'617	2'627	2'675	2'694	2'708	2'737	2'762	2'777	2'792	2'820	2'838	2'6561
2'899	2'881	2'871	2'868	2'874	2'865	2'879	2'885	2'882	2'882	2'875	2'865	2'862	2'867	2'867	2'8845
2'818	2'804	2'778	2'796	2'769	2'761	2'760	2'754	2'735	—	—	—	—	—	—	2'7466
2'507	2'503	2'466	2'498	2'508	2'511	2'539	2'550	2'559	2'546	2'538	2'526	2'520	2'526	2'544	2'5466
2'637	2'637	2'615	2'616	2'616	2'601	2'612	2'616	2'624	2'627	2'624	2'615	2'619	2'615	2'629	2'5462
2'603	2'604	2'594	2'594	2'586	2'590	2'595	2'592	2'585	2'579	2'571	2'572	2'568	2'562	2'572	2'6092
2'465	2'434	2'402	2'399	2'408	2'403	2'415	2'422	2'440	2'392	2'387	2'375	2'356	2'357	2'351	2'4490
2'241	2'248	2'232	2'274	2'298	2'303	2'320	2'302	2'309	2'322	2'333	2'333	2'334	2'355	2'366	2'3025
2'469	2'478	2'483	2'493	2'499	2'496	2'498	2'498	2'500	—	—	—	—	—	—	2'5039
2'708	2'723	2'734	2'765	2'765	2'777	2'788	2'795	2'810	2'829	2'797	2'789	2'785	2'788	2'813	2'7445
2'756	2'755	2'753	2'762	2'765	2'764	2'777	2'779	2'776	2'770	2'771	2'774	2'769	2'774	2'793	2'7848
2'755	2'739	2'749	2'743	2'721	2'749	2'745	2'731	2'722	2'726	2'720	2'703	2'704	2'699	2'725	2'7540
2'643	2'635	2'626	2'643	2'643	2'609	2'614	2'608	2'605	2'606	2'583	2'570	2'567	2'569	2'603	2'6384
2'511	2'506	2'497	2'487	2'489	2'497	2'500	2'495	2'491	2'491	2'486	2'481	2'486	2'490	2'500	2'5207
2'502	2'508	2'506	2'502	2'497	2'483	2'501	2'512	2'510	—	—	—	—	—	—	2'5113
2'509	2'519	2'507	2'513	2'513	2'515	2'521	2'514	2'509	2'518	2'515	2'513	2'509	2'522	2'533	2'5113
2'511	2'506	2'489	2'493	2'497	2'490	2'506	2'504	2'507	2'508	2'507	2'507	2'500	2'502	2'511	2'5214
2'5791	2'5747	2'5643	2'5668	2'5702	2'5734	2'5874	2'5865	2'5870	2'5939	2'5916	2'5888	2'5874	2'5930	2'6085	2'5939

		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JULY.													
1	In. 2'497	In. 2'487	In. 2'500	In. 2'505	In. 2'509	In. 2'514	In. 2'501	In. 2'486	In. 2'473	In. 2'459	In. 2'473	In. 2'471	
2	2'608	2'628	2'639	2'659	2'659	2'652	2'647	2'645	2'648	2'642	2'632	2'626	
3	2'723	2'745	2'745	2'725	2'720	2'707	2'695	2'667	2'649	2'642	2'636	2'609	
4	2'547	2'541	2'540	2'526	2'527	2'513	2'498	2'471	2'442	2'427	2'402	2'410	
5	—	—	—	—	—	—	—	—	—	—	—	—	
6	2'426	2'435	2'434	2'438	2'452	2'449	2'445	2'444	2'426	2'433	2'426	2'409	
7	2'574	2'585	2'593	2'607	2'611	2'610	2'602	2'600	2'583	2'568	2'562	2'559	
8	2'564	2'558	2'575	2'564	2'568	2'534	2'516	2'507	2'487	2'483	2'469	2'464	
9	2'515	2'522	2'523	2'547	2'544	2'594	2'618	2'494	2'494	2'496	2'478	2'459	
10	2'494	2'495	2'504	2'502	2'507	2'493	2'485	2'492	2'475	2'457	2'457	2'439	
11	2'478	2'482	2'473	2'467	2'456	2'449	2'434	2'433	2'453	2'445	2'438	2'426	
12	—	—	—	—	—	—	—	—	—	—	—	—	
13	2'595	2'603	2'595	2'572	2'573	2'544	2'538	2'518	2'513	2'510	2'481	2'461	
14	2'607	2'614	2'643	2'641	2'641	2'647	2'647	2'645	2'649	2'666	2'676	2'692	
15	2'824	2'831	2'838	2'834	2'841	2'841	2'829	2'831	2'834	2'838	2'833	2'847	
16	2'930	2'945	2'956	2'962	2'973	2'975	2'965	2'949	2'944	2'945	2'953	2'946	
17	3'006	3'027	3'024	3'017	3'020	3'011	2'986	2'978	2'959	2'947	2'946	2'908	
18	2'909	2'921	2'915	2'917	2'914	2'905	2'891	2'880	2'867	2'858	2'853	2'841	
19	—	—	—	—	—	—	—	—	—	—	—	—	
20	2'576	2'582	2'587	2'575	2'584	2'585	2'574	2'561	2'546	2'538	2'531	2'531	
21	2'602	2'612	2'610	2'610	2'611	2'610	2'599	2'594	2'589	2'581	2'577	2'572	
22	2'585	2'597	2'593	2'584	2'577	2'569	2'568	2'550	2'549	2'537	2'531	2'533	
23	2'492	2'501	2'492	2'471	2'460	2'456	2'438	2'431	2'425	2'406	2'388	2'392	
24	2'300	2'310	2'308	2'284	2'282	2'258	2'275	2'291	2'305	2'319	2'349	2'392	
25	2'592	2'608	2'619	2'625	2'653	2'638	2'633	2'615	2'614	2'613	2'630	2'626	
26	—	—	—	—	—	—	—	—	—	—	—	—	
27	2'773	2'793	2'793	2'792	2'782	2'785	2'779	2'781	2'765	2'750	2'739	2'717	
28	2'646	2'644	2'639	2'649	2'641	2'631	2'610	2'584	2'562	2'541	2'543	2'513	
29	2'463	2'446	2'450	2'478	2'447	2'436	2'434	2'429	2'401	2'403	2'416	2'399	
30	2'322	2'322	2'309	2'316	2'311	2'313	2'304	2'296	2'293	2'296	2'319	2'318	
31	2'548	2'546	2'550	2'559	2'570	2'598	2'594	2'592	2'590	2'588	2'590	2'587	
Hourly Means	2'5999	2'6067	2'6093	2'6084	2'6079	2'6043	2'5965	2'5851	2'5765	2'5711	2'5678	2'5588	
AUGUST.													
1	2'663	2'682	2'693	2'700	2'700	2'697	2'691	2'685	2'682	2'670	2'677	2'678	
2	—	—	—	—	—	—	—	—	—	—	—	—	
3	2'797	2'803	2'808	2'818	2'835	2'812	2'805	2'791	2'758	2'739	2'727	2'733	
4	2'729	2'733	2'728	2'722	2'697	2'685	2'673	2'653	2'647	2'628	2'609	2'611	
5	2'646	2'646	2'636	2'643	2'641	2'631	2'609	2'582	2'563	2'547	2'534	2'542	
6	2'642	2'657	2'664	2'671	2'681	2'688	2'685	2'675	2'675	2'667	2'661	2'671	
7	2'780	2'793	2'789	2'795	2'793	2'785	2'775	2'771	2'762	2'750	2'739	2'737	
8	2'691	2'683	2'711	2'735	2'699	2'681	2'655	2'650	2'641	2'616	2'608	2'588	
9	—	—	—	—	—	—	—	—	—	—	—	—	
10	2'527	2'533	2'543	2'557	2'567	2'586	2'580	2'565	2'559	2'546	2'544	2'546	
11	2'699	2'714	2'719	2'739	2'740	2'709	2'700	2'691	2'670	2'664	2'649	2'637	
12	2'615	2'619	2'612	2'598	2'591	2'573	2'554	2'532	2'512	2'503	2'486	2'480	
13	2'491	2'503	2'502	2'506	2'512	2'509	2'544	2'488	2'487	2'477	2'473	2'467	
14	2'520	2'534	2'536	2'542	2'553	2'540	2'528	2'528	2'503	2'486	2'476	2'478	
15	2'462	2'464	2'464	2'480	2'468	2'459	2'444	2'421	2'392	2'367	2'354	2'320	
16	—	—	—	—	—	—	—	—	—	—	—	—	
17	2'407	2'419	2'435	2'448	2'465	2'472	2'482	2'482	2'486	2'486	2'491	2'508	
18	2'733	2'743	2'745	2'771	2'775	2'775	2'765	2'763	2'769	2'757	2'751	2'718	
19	2'807	2'811	2'815	2'817	2'814	2'809	2'802	2'791	2'773	2'763	2'759	2'741	
20	2'625	2'634	2'636	2'634	2'631	2'627	2'628	2'597	2'605	2'583	2'589	2'579	
21	2'583	2'576	2'609	2'617	2'627	2'625	2'612	2'612	2'617	2'595	2'585	2'568	
22	2'550	2'570	2'572	2'575	2'565	2'558	2'548	2'531	2'531	2'521	2'513	2'501	
23	—	—	—	—	—	—	—	—	—	—	—	—	
24	2'792	2'800	2'819	2'827	2'844	2'841	2'820	2'819	2'811	2'799	2'777	2'783	
25	2'787	2'787	2'800	2'804	2'807	2'801	2'788	2'771	2'754	2'745	2'731	2'731	
26	2'711	2'723	2'739	2'726	2'723	2'721	2'712	2'693	2'680	2'670	2'668	2'678	
27	2'717	2'727	2'732	2'750	2'757	2'759	2'758	2'754	2'753	2'731	2'716	2'729	
28	2'767	2'776	2'776	2'786	2'789	2'789	2'786	2'759	2'718	2'713	2'709	2'705	
29	2'691	2'695	2'687	2'687	2'668	2'663	2'648	2'637	2'658	2'622	2'619	2'610	
30	—	—	—	—	—	—	—	—	—	—	—	—	
31	2'611	2'641	2'642	2'642	2'635	2'625	2'611	2'608	2'596	2'577	2'573	2'567	
Hourly Means	2'6555	2'6641	2'6697	2'6765	2'6760	2'6700	2'6601	2'6480	2'6385	2'6239	2'6171	2'6128	

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

			12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
9	10	11	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
459	2'473	2'471	2'473	2'474	2'473	2'486	2'491	2'496	2'497	2'513	2'527	2'539	2'565	2'592	2'5001
442	2'632	2'626	2'636	2'642	2'672	2'659	2'666	2'675	2'684	2'690	2'681	2'684	2'684	2'697	2'6541
442	2'636	2'609	2'603	2'591	2'582	2'606	2'599	2'583	2'563	2'560	2'555	2'560	2'560	2'550	2'6323
427	2'402	2'410	2'408	2'396	2'392	2'439	2'445	2'438	—	—	—	—	—	—	—
433	2'426	2'409	—	—	—	—	—	2'339	2'347	2'355	2'368	—	2'378	2'397	2'4394
368	2'562	2'559	2'445	2'452	2'474	2'490	2'498	2'505	2'506	2'508	2'519	2'518	2'518	2'555	2'4626
483	2'469	2'464	2'565	2'567	2'570	2'587	2'589	2'582	2'565	2'568	2'565	2'561	2'559	2'563	2'5790
496	2'478	2'459	2'459	2'471	2'463	2'492	2'494	2'497	2'487	2'490	2'492	2'497	2'506	2'504	2'5059
457	2'457	2'439	2'450	2'430	2'442	2'446	2'448	2'452	2'447	2'455	2'469	2'471	2'488	2'494	2'4907
445	2'438	2'426	2'491	2'474	2'498	2'517	2'531	2'527	2'524	2'517	2'485	2'487	2'491	2'483	2'4942
—	—	—	2'428	2'428	2'429	2'450	2'446	2'432	—	—	—	—	—	—	—
510	2'481	2'461	—	—	—	—	—	2'548	2'550	2'552	2'553	2'562	2'562	2'592	2'4752
566	2'676	2'692	2'453	2'457	2'483	2'502	2'514	2'531	2'546	2'538	2'548	2'551	2'562	2'566	2'5314
438	2'833	2'847	2'707	2'717	2'717	2'721	2'729	2'732	2'735	2'765	2'769	2'789	2'815	2'808	2'6988
945	2'953	2'946	2'861	2'863	2'861	2'887	2'890	2'899	2'899	2'902	2'904	2'908	2'925	2'932	2'8647
947	2'946	2'908	2'910	2'936	2'932	2'946	2'951	2'951	2'956	2'951	2'951	2'958	2'975	2'997	2'9536
858	2'853	2'841	2'902	2'896	2'909	2'921	2'913	2'915	2'912	2'898	2'895	2'878	2'889	2'901	2'9441
—	—	—	2'849	2'843	2'841	2'842	2'842	2'858	—	—	—	—	—	—	—
538	2'531	2'531	—	—	—	—	—	2'561	2'563	2'551	2'551	2'548	2'570	2'570	2'7946
581	2'577	2'572	2'525	2'536	2'541	2'561	2'569	2'578	2'579	2'579	2'578	2'574	2'576	2'572	2'6642
537	2'534	2'533	2'561	2'566	2'575	2'589	2'589	2'586	2'590	2'572	2'577	2'588	2'576	2'583	2'5884
406	2'388	2'362	2'505	2'506	2'515	2'508	2'518	2'511	2'509	2'486	2'467	2'465	2'445	2'465	2'5274
319	2'349	2'362	2'350	2'364	2'356	2'362	2'359	2'358	2'347	2'338	2'348	2'308	2'293	2'298	2'3905
643	2'630	2'626	2'392	2'418	2'448	2'460	2'483	2'497	2'513	2'526	2'535	2'543	2'546	2'578	2'3992
—	—	—	2'634	2'642	2'648	2'678	2'695	2'699	—	—	—	—	—	—	—
750	2'739	2'717	—	—	—	—	—	2'741	2'742	2'740	2'739	2'739	2'744	2'744	2'6665
544	2'543	2'543	2'697	2'693	2'691	2'707	2'702	2'701	2'695	2'688	2'685	2'678	2'662	2'648	2'7291
463	2'416	2'399	2'525	2'525	2'511	2'515	2'520	2'526	2'501	2'497	2'464	2'426	2'464	2'472	2'5492
296	2'319	2'318	2'361	2'366	2'385	2'373	2'343	2'345	2'333	2'343	2'303	2'304	2'317	2'321	2'3850
588	2'590	2'587	2'392	2'348	2'381	2'398	2'405	2'411	2'415	2'449	2'439	2'448	2'455	2'502	2'3615
—	—	—	2'601	2'617	2'626	2'635	2'635	2'642	2'638	2'617	2'618	2'646	2'646	2'658	2'6063
5711	2'5678	2'5588	2'5600	2'5631	2'5691	2'5853	2'5872	2'5890	2'5783	2'5783	2'5766	2'5774	2'5831	2'5941	2'5847
670	2'677	2'678	2'678	2'678	2'681	2'701	2'709	2'709	—	—	—	—	—	—	—
739	2'727	2'733	2'725	2'725	2'733	2'733	2'731	2'734	2'758	2'751	2'746	2'740	2'770	2'774	2'7050
628	2'609	2'611	2'663	2'609	2'611	2'614	2'629	2'631	2'623	2'631	2'636	2'631	2'625	2'634	2'6497
547	2'534	2'542	2'545	2'545	2'561	2'581	2'586	2'584	2'593	2'590	2'596	2'597	2'606	2'614	2'5924
567	2'664	2'671	2'675	2'678	2'697	2'712	2'723	2'728	2'733	2'735	2'737	2'736	2'730	2'755	2'6950
750	2'739	2'727	2'727	2'727	2'726	2'736	2'736	2'737	2'727	2'697	2'699	2'688	2'683	2'673	2'7420
616	2'608	2'588	2'588	2'584	2'590	2'588	2'585	2'577	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	2'488	2'470	2'471	2'472	2'490	2'505	2'505	2'5986
546	2'544	2'546	2'560	2'560	2'595	2'604	2'612	2'629	2'630	2'646	2'651	2'653	2'654	2'675	2'5888
561	2'649	2'637	2'631	2'646	2'684	2'648	2'609	2'611	2'606	2'601	2'598	2'604	2'598	2'608	2'6506
503	2'486	2'480	2'482	2'476	2'478	2'478	2'481	2'475	2'471	2'471	2'478	2'472	2'468	2'479	2'5165
477	2'473	2'467	2'467	2'467	2'479	2'492	2'505	2'522	2'510	2'498	2'491	2'492	2'497	2'498	2'4933
486	2'476	2'478	2'466	2'470	2'467	2'483	2'479	2'480	2'473	2'459	2'400	2'439	2'448	2'456	2'4893
467	2'354	2'320	2'328	2'326	2'342	2'333	2'339	2'341	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	2'358	2'353	2'351	2'351	2'366	2'395	2'395	2'3867
486	2'494	2'508	2'516	2'481	2'550	2'582	2'583	2'591	2'615	2'632	2'652	2'673	2'699	2'709	2'5357
757	2'751	2'748	2'748	2'748	2'772	2'773	2'777	2'791	2'793	2'803	2'802	2'800	2'797	2'794	2'7706
763	2'759	2'741	2'719	2'721	2'715	2'717	2'715	2'701	2'695	2'667	2'650	2'640	2'632	2'626	2'7375
583	2'589	2'579	2'575	2'575	2'579	2'593	2'603	2'591	2'589	2'578	2'574	2'563	2'564	2'569	2'5969
595	2'585	2'568	2'561	2'561	2'569	2'563	2'565	2'564	2'563	2'558	2'559	2'551	2'548	2'550	2'5810
521	2'513	2'504	2'494	2'484	2'509	2'511	2'511	2'501	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	2'670	2'702	2'722	2'733	2'747	2'761	2'761	2'5785
599	2'7	2'783	2'784	2'773	2'764	2'783	2'785	2'790	2'792	2'790	2'779	2'775	2'772	2'775	2'7960
745	2'7	2'734	2'732	2'714	2'714	2'739	2'737	2'745	2'713	2'705	2'705	2'700	2'696	2'698	2'7452
570	2'668	2'678	2'668	2'666	2'676	2'683	2'685	2'684	2'679	2'672	2'674	2'670	2'671	2'669	2'6892
731	2'746	2'729	2'731	2'721	2'741	2'746	2'746	2'744	2'754	2'754	2'741	2'749	2'745	2'757	2'7423
713	2'709	2'705	2'703	2'703	2'703	2'697	2'694	2'686	2'684	2'702	2'689	2'697	2'684	2'7260	—
822	2'616	2'610	2'602	2'605	2'600	2'604	2'606	2'601	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	2'596	2'598	2'604	2'605	2'604	2'608	2'608	2'6306
77	2'573	2'567	2'567	2'573	2'586	2'595	2'596	2'606	2'598	2'595	2'600	2'606	2'596	2'596	2'6018
839	2'6171	2'6128	2'6111	2'6076	2'6162	2'6257	2'6282	2'6267	2'6329	2'6302	2'6282	2'6285	2'6312	2'6383	2'6382

		BAROMETRIC PRESSURE.												
		Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.		0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.		18	19	20	21	22	23	0	1	2	3	4	5	
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
SEPTEMBER.	1	2'605	2'620	2'624	2'627	2'643	2'630	2'595	2'591	2'590	2'578	2'584	2'587	
	2	2'647	2'656	2'652	2'646	2'646	2'638	2'619	2'601	2'592	2'568	2'573	2'561	
	3	2'513	2'514	2'508	2'516	2'508	2'510	2'500	2'479	2'453	2'419	2'423	2'408	
	4	2'387	2'403	2'405	2'395	2'398	2'374	2'358	2'354	2'292	2'321	2'322	2'317	
	5	2'476	2'486	2'496	2'518	2'529	2'525	2'533	2'536	2'546	2'557	2'575	2'589	
	6	—	—	—	—	—	—	—	—	—	—	—	—	—
	7	2'675	2'685	2'690	2'685	2'679	2'671	2'645	2'622	2'578	2'575	2'567	2'573	
	8	2'713	2'725	2'729	2'739	2'743	2'748	2'733	2'733	2'725	2'723	2'723	2'733	
	9	2'902	2'921	2'929	2'943	2'942	2'955	2'931	2'905	2'881	2'876	2'862	2'866	
	10	2'923	2'927	2'927	2'920	2'927	2'919	2'903	2'901	2'893	2'874	2'866	2'846	
	11	2'805	2'807	2'794	2'789	2'774	2'764	2'753	2'729	2'700	2'686	2'675	2'667	
	12	2'609	2'605	2'610	2'608	2'599	2'584	2'574	2'579	2'563	2'565	2'551	2'543	
	13	—	—	—	—	—	—	—	—	—	—	—	—	—
	14	2'510	2'506	2'490	2'478	2'457	2'440	2'440	2'459	2'387	2'366	2'360	2'358	
	15	2'633	2'665	2'695	2'717	2'729	2'732	2'714	2'688	2'672	2'674	2'672	2'660	
	16	2'810	2'851	2'827	2'811	2'805	2'797	2'772	2'754	2'720	2'701	2'678	2'661	
	17	2'577	2'571	2'565	2'560	2'542	2'530	2'516	2'511	2'494	2'506	2'498	2'490	
	18	2'460	2'484	2'490	2'499	2'531	2'535	2'550	2'548	2'541	2'546	2'555	2'563	
	19	2'674	2'687	2'696	2'724	2'735	2'737	2'736	2'743	2'751	2'718	2'728	2'733	
	20	—	—	—	—	—	—	—	—	—	—	—	—	—
	21	2'721	2'759	2'774	2'812	2'834	2'834	2'824	2'798	2'778	2'785	2'783	2'787	
	22	2'847	2'848	2'850	2'850	2'857	2'841	2'826	2'805	2'786	2'790	2'769	2'758	
	23	2'672	2'665	2'653	2'653	2'641	2'634	2'618	2'594	2'558	2'545	2'543	2'528	
	24	2'599	2'641	2'609	2'646	2'648	2'611	2'619	2'627	2'629	2'629	2'635	2'649	
	25	2'685	2'666	2'643	2'593	2'553	2'513	2'471	2'451	2'419	2'363	2'331	2'270	
	26	2'521	2'539	2'539	2'556	2'570	2'573	2'563	2'542	2'529	2'519	2'511	2'513	
	27	—	—	—	—	—	—	—	—	—	—	—	—	—
	28	2'874	2'862	2'878	2'876	2'893	2'861	2'846	2'833	2'823	2'799	2'793	2'789	
	29	2'762	2'740	2'736	2'719	2'699	2'681	2'641	2'639	2'627	2'626	2'604	2'590	
	30	2'437	2'441	2'433	2'420	2'413	2'398	2'375	2'352	2'324	2'310	2'312	2'326	
Hourly Means		2'6554	2'6641	2'6632	2'6654	2'6652	2'6552	2'6406	2'6298	2'6089	2'6007	2'5959	2'5915	
OCTOBER.	1	2'475	2'491	2'518	2'543	2'543	2'555	2'549	2'547	2'535	2'533	2'529	2'505	
	2	2'434	2'470	2'471	2'505	2'525	2'511	2'546	2'545	2'557	2'587	2'587	2'607	
	3	2'732	2'766	2'766	2'765	2'776	2'747	2'732	2'726	2'686	2'675	2'671	2'658	
	4	—	—	—	—	—	—	—	—	—	—	—	—	
	5	2'670	2'675	2'680	2'684	2'683	2'690	2'688	2'676	2'679	2'675	2'687	2'711	
	6	2'845	2'869	2'875	2'868	2'847	2'835	2'801	2'772	2'742	2'733	2'707	2'699	
	7	2'687	2'699	2'701	2'700	2'689	2'670	2'654	2'638	2'651	2'658	2'655	2'657	
	8	2'875	2'903	2'919	2'925	2'926	2'944	2'954	2'938	2'936	2'940	2'922	2'919	
	9	2'852	2'854	2'836	2'808	2'802	2'811	2'801	2'789	2'823	2'838	2'859	2'894	
	10	3'104	3'132	3'139	3'148	3'151	3'155	3'156	3'156	3'140	3'134	3'108	3'113	
	11	—	—	—	—	—	—	—	—	—	—	—	—	—
	12	2'682	2'690	2'677	2'665	2'638	2'635	2'607	2'582	2'552	2'538	2'535	2'541	
	13	2'468	2'444	2'424	2'388	2'336	2'288	2'235	2'182	2'117	2'038	2'020	1'968	
	14	2'403	2'417	2'434	2'445	2'447	2'450	2'441	2'432	2'422	2'414	2'409	2'394	
	15	2'495	2'519	2'555	2'570	2'590	2'601	2'602	2'611	2'613	2'618	2'623	2'633	
	16	2'507	2'489	2'465	2'457	2'445	2'431	2'407	2'375	2'346	2'422	2'425	2'433	
	17	2'922	2'941	2'865	2'843	2'852	2'856	2'831	2'831	2'816	2'818	2'829	2'837	
	18	—	—	—	—	—	—	—	—	—	—	—	—	—
	19	2'772	2'783	2'785	2'787	2'776	2'762	2'746	2'751	2'750	2'739	2'736	2'712	
	20	2'604	2'604	2'601	2'598	2'600	2'589	2'585	2'571	2'585	2'607	2'618	2'649	
	21	2'764	2'768	2'798	2'796	2'794	2'787	2'769	2'765	2'756	2'760	2'756	2'754	
	22	2'587	2'581	2'557	2'538	2'538	2'587	2'609	2'638	2'674	2'726	2'760	2'780	
	23	2'712	2'712	2'693	2'639	2'559	2'507	2'445	2'351	2'338	2'336	2'346	2'361	
	24	2'464	2'476	2'516	2'528	2'531	2'541	2'556	2'564	2'598	2'625	2'647	2'694	
	25	—	—	—	—	—	—	—	—	—	—	—	—	—
	26	2'845	2'833	2'823	2'818	2'806	2'767	2'724	2'652	2'613	2'592	2'571	2'523	
	27	2'295	2'327	2'358	2'402	2'416	2'439	2'443	2'453	2'457	2'483	2'503	2'526	
	28	2'796	2'809	2'825	2'825	2'826	2'810	2'778	2'757	2'735	2'722	2'719	2'704	
	29	2'697	2'643	2'655	2'642	2'652	2'656	2'661	2'649	2'653	2'683	2'702	2'734	
	30	2'975	3'000	3'031	3'019	3'063	3'076	3'091	3'099	3'103	3'125	3'129	3'141	
	31	3'186	3'192	3'192	3'199	3'175	3'166	3'148	3'118	3'098	3'086	3'069	3'069	
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means		2'6947	2'7070	2'7097	2'7087	2'7028	2'6996	2'6881	2'6730	2'6665	2'6706	2'6716	2'6737	

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
578	2'584	2'587
568	2'573	2'564
419	2'423	2'408
321	2'322	2'317
557	2'575	2'589
575	2'567	2'575
723	2'723	2'733
876	2'862	2'866
874	2'866	2'846
686	2'675	2'667
565	2'551	2'543
366	2'360	2'358
674	2'672	2'660
701	2'678	2'671
506	2'498	2'490
546	2'555	2'563
718	2'728	2'733
785	2'783	2'787
790	2'769	2'758
545	2'543	2'528
629	2'635	2'649
361	2'331	2'270
519	2'511	2'513
799	2'793	2'789
626	2'604	2'590
310	2'312	2'326
6007	2'5959	2'5915
533	2'529	2'505
587	2'587	2'607
675	2'671	2'658
675	2'687	2'711
733	2'707	2'689
658	2'655	2'657
910	2'922	2'919
838	2'859	2'891
134	3'108	3'113
538	2'535	2'511
038	2'020	1'968
414	2'409	2'393
618	2'623	2'633
422	2'425	2'433
818	2'829	2'837
739	2'736	2'712
607	2'618	2'619
760	2'756	2'754
726	2'720	2'710
336	2'316	2'361
625	2'647	2'691
592	2'571	2'523
483	2'503	2'526
722	2'719	2'701
683	2'702	2'731
125	3'129	3'141
086	3'059	3'009
6706	2'6716	2'6737

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'593	2'613	2'632	2'624	2'627	2'634	2'633	2'630	2'624	2'628	2'628	2'624	2'6152
2'547	2'537	2'542	2'546	2'533	2'537	2'531	2'530	2'512	2'510	2'498	2'482	2'5711
2'410	2'405	2'408	2'408	2'390	2'382	2'374	2'325	2'329	2'341	2'347	2'375	2'4269
2'314	2'344	2'354	2'357	2'371	2'385	2'386	2'394	2'404	2'412	2'418	2'452	2'3715
2'611	2'638	2'675	2'719	2'732	2'736	—	—	—	—	—	—	2'6105
—	—	—	—	—	—	2'711	2'707	2'703	2'699	2'684	2'671	2'6407
2'567	2'596	2'622	2'653	2'632	2'616	2'653	2'652	2'668	2'679	2'684	2'687	2'7691
2'740	2'765	2'782	2'783	2'789	2'810	2'810	2'826	2'829	2'839	2'847	2'872	2'8919
2'856	2'849	2'857	2'861	2'867	2'867	2'868	2'880	2'888	2'889	2'889	2'891	2'8669
2'834	2'820	2'820	—	2'811	2'829	2'822	2'841	2'839	2'843	2'841	2'813	2'6818
2'651	2'639	2'629	2'647	2'641	2'643	2'630	2'596	2'584	2'582	2'595	2'593	2'5589
2'551	2'545	2'543	—	2'537	2'531	2'540	—	—	—	—	—	2'4371
—	—	—	—	—	—	2'533	2'541	2'538	2'524	2'520	2'521	2'7102
2'356	2'376	2'412	2'391	2'391	2'399	2'409	2'430	2'443	2'506	2'534	2'593	2'6959
2'675	2'696	2'708	2'714	2'714	2'722	2'723	2'749	2'745	2'760	2'780	2'809	2'4924
2'667	2'659	2'663	2'642	2'636	2'624	2'607	2'622	2'610	2'598	2'590	2'586	2'5715
2'477	2'477	2'477	2'487	2'463	2'454	2'462	2'438	2'434	2'426	2'431	2'432	2'6772
2'583	2'555	2'599	2'604	2'614	2'621	2'632	2'625	2'630	2'630	2'643	2'660	2'7982
2'717	2'708	2'718	2'717	2'720	2'721	—	—	—	—	—	—	2'7699
—	—	—	—	—	—	2'487	2'495	2'511	2'555	2'600	2'661	2'5419
2'789	2'793	2'794	2'819	2'812	2'806	2'809	2'808	2'793	2'797	2'810	2'837	2'664
2'755	2'753	2'753	2'729	2'730	2'720	2'715	2'733	2'729	2'683	2'687	2'667	2'5777
2'527	2'555	2'562	2'543	2'552	2'554	2'562	2'553	2'553	2'565	2'557	2'577	2'6732
2'668	2'698	2'727	2'743	2'752	2'748	2'743	2'726	2'718	2'710	2'693	2'690	2'4383
2'266	2'246	2'312	2'323	2'346	2'368	2'382	2'430	2'451	2'456	2'480	2'500	2'5838
2'501	2'499	2'493	2'495	2'488	2'489	—	—	—	—	—	—	2'8118
—	—	—	—	—	—	2'722	2'736	2'751	2'755	2'781	2'824	2'8141
2'785	2'791	2'789	2'797	2'771	2'776	2'772	2'784	2'781	2'775	2'772	2'764	2'5091
2'566	2'578	2'565	2'561	2'555	2'532	2'542	2'506	2'489	2'481	2'473	2'463	2'3817
2'342	2'352	2'371	2'362	2'370	2'374	2'382	2'387	2'404	2'412	2'418	2'441	2'6237
2'5003	2'5963	2'6084	2'6014	2'6092	2'6122	2'6115	2'6133	2'6139	2'6175	2'6231	2'6355	2'5052
2'503	2'501	2'513	2'500	2'498	2'474	2'496	2'503	2'469	2'463	2'445	2'434	2'6103
2'623	2'611	2'659	2'685	2'691	2'698	2'706	2'713	2'711	2'708	2'708	2'726	2'6838
2'649	2'645	2'649	2'635	2'611	2'612	—	—	—	—	—	—	2'7148
2'711	2'743	2'769	2'793	2'816	2'813	2'819	2'831	2'846	2'853	2'843	2'831	2'7476
2'691	2'689	2'693	2'665	2'673	2'661	2'666	2'672	2'673	2'671	2'669	2'687	2'7177
2'697	2'709	2'719	2'715	2'705	2'767	2'787	2'775	2'770	2'814	2'828	2'849	2'9010
2'928	2'904	2'890	2'910	2'908	2'902	2'878	2'811	2'844	2'838	2'831	2'814	2'9268
2'926	2'938	2'982	3'021	3'029	3'035	3'036	3'038	3'019	3'062	3'076	3'084	3'0301
3'117	3'113	3'101	3'100	3'118	3'122	—	—	—	—	—	—	2'480
—	—	—	—	—	—	2'777	2'763	2'747	2'721	2'716	2'688	2'5750
2'547	2'559	2'559	2'552	2'574	2'571	2'549	2'540	2'532	2'500	2'494	2'480	2'2227
2'090	2'033	2'085	2'108	2'146	2'181	2'225	2'283	2'304	2'320	2'343	2'377	2'4259
2'405	2'400	2'409	2'425	2'423	2'412	2'408	2'415	2'427	2'447	2'459	2'485	2'6194
2'614	2'660	2'672	2'659	2'680	2'662	2'663	2'667	2'678	2'653	2'635	2'563	2'5323
2'458	2'460	2'536	2'579	2'619	2'656	2'626	2'620	2'702	2'745	2'792	2'787	2'8263
2'843	2'844	2'831	2'822	2'820	2'816	—	—	—	—	—	—	2'772
—	—	—	—	—	—	2'770	2'764	2'764	2'764	2'758	2'772	2'620
2'716	2'716	2'714	2'700	2'699	2'680	2'678	2'670	2'660	2'651	2'648	2'648	2'7618
2'648	2'665	2'667	2'706	2'716	2'721	2'735	2'750	2'750	2'750	2'740	2'761	2'6533
2'770	2'793	2'772	2'779	2'765	2'783	2'760	2'752	2'712	2'676	2'644	2'617	2'7537
2'811	2'860	2'866	2'878	2'880	2'864	2'859	2'831	2'804	2'798	2'771	2'730	2'7336
2'370	2'386	2'380	2'399	2'403	2'411	2'413	2'405	2'407	2'422	2'410	2'454	2'6915
2'710	2'732	2'752	2'748	2'771	2'771	—	—	—	—	—	—	2'5555
—	—	—	—	—	—	2'921	2'914	2'898	2'894	2'874	2'871	2'5588
2'512	2'488	2'462	2'450	2'430	2'420	2'401	2'358	2'337	2'313	2'295	2'295	2'7190
2'566	2'600	2'606	2'667	2'671	2'691	2'707	2'746	2'752	2'759	2'773	2'790	2'7616
2'698	2'686	2'681	2'692	2'689	2'689	2'671	2'649	2'633	2'625	2'621	2'616	2'7605
2'758	2'792	2'804	2'834	2'846	2'863	2'877	2'877	2'894	2'901	2'908	2'917	3'1303
3'156	3'171	3'185	3'180	3'184	3'192	3'193	3'198	3'201	3'193	3'198	3'197	2'9997
3'017	3'025	3'018	3'028	3'029	3'023	2'734	2'724	2'709	2'690	2'677	2'690	2'6960
2'6853	2'6947	2'7030	2'7119	2'7206	2'7231	2'7041	2'7018	2'7004	2'6990	2'6961	2'6983	2'6960



BAROMETRIC PRESSURE.													
Barometer at 32° = 27 English inches + the numbers in the Table.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
NOVEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
	2	2'680	2'680	2'687	2'677	2'694	2'684	2'674	2'667	2'660	2'646	2'656	2'680
	3	2'786	2'800	2'820	2'818	2'828	2'827	2'805	2'791	2'799	2'798	2'778	2'783
	4	2'920	2'950	2'970	3'004	3'013	3'034	3'024	3'035	3'023	3'031	3'047	3'071
	5	3'148	3'174	3'192	3'206	3'200	3'192	3'178	3'173	3'153	3'147	3'136	3'127
	6	3'070	3'058	3'082	3'090	3'070	3'065	3'053	3'022	3'009	3'002	2'999	2'979
	7	2'962	2'950	2'950	2'939	2'929	2'931	2'912	2'904	2'886	2'883	2'868	2'860
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	2'639	2'657	2'663	2'684	2'682	2'688	2'681	2'683	2'678	2'690	2'690	2'718
	10	2'758	2'754	2'782	2'776	2'770	2'741	2'733	2'719	2'698	2'677	2'695	2'691
	11	2'648	2'670	2'686	2'700	2'714	2'712	2'718	2'724	2'717	2'735	2'747	2'773
	12	2'874	2'902	2'910	2'926	2'930	2'930	2'917	2'894	2'886	2'881	2'886	2'878
	13	2'858	2'866	2'868	2'862	2'857	2'845	2'849	2'807	2'793	2'785	2'783	2'780
	14	2'736	2'752	2'759	2'761	2'753	2'739	2'731	2'712	2'692	2'694	2'696	2'700
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	2'812	2'834	2'847	2'854	2'867	2'865	2'867	2'879	2'867	2'878	2'878	2'892
	17	2'827	2'817	2'817	2'811	2'793	2'770	2'746	2'736	2'722	2'696	2'670	2'650
	18	2'569	2'569	2'581	2'589	2'596	2'586	2'581	2'573	2'595	2'590	2'609	2'616
	19	2'466	2'451	2'403	2'351	2'339	2'269	2'191	2'188	2'075	2'073	2'058	2'050
	20	2'295	2'319	2'337	2'367	2'397	2'410	2'411	2'411	2'441	2'464	2'466	2'476
	21	2'501	2'510	2'512	2'509	2'503	2'494	2'466	2'459	2'445	2'403	2'391	2'383
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	2'490	2'531	2'549	2'591	2'604	2'617	2'613	2'631	2'621	2'604	2'600	2'583
	24	2'378	2'386	2'396	2'400	2'397	2'395	2'385	2'375	2'379	2'385	2'378	2'373
	25	2'261	2'259	2'276	2'258	2'241	2'181	2'172	2'153	2'156	2'168	2'184	2'197
	26	2'214	2'223	2'233	2'242	2'248	2'242	2'199	2'192	2'188	2'212	2'232	2'250
	27	2'560	2'554	2'568	2'578	2'572	2'548	2'521	2'497	2'467	2'439	2'429	2'395
	28	2'350	2'366	2'394	2'437	2'475	2'483	2'498	2'506	2'514	2'521	2'525	2'535
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	3'030	3'036	3'052	3'073	3'081	3'065	3'067	3'041	3'027	3'039	3'051	3'061
Hourly Means	2'6736	2'6827	2'6922	2'7001	2'7005	2'6914	2'6785	2'6709	2'6582	2'6578	2'6581	2'6600	
DECEMBER.	1	3'097	3'111	3'097	3'086	3'085	3'046	3'020	2'992	2'974	2'955	2'940	2'922
	2	2'582	2'558	2'534	2'492	2'481	2'436	2'402	2'375	2'358	2'347	2'347	2'302
	3	2'299	2'312	2'331	2'348	2'354	2'353	2'345	2'369	2'375	2'401	2'405	2'435
	4	2'686	2'700	2'721	2'761	2'776	2'776	2'788	2'808	2'830	2'853	2'877	2'919
	5	3'125	3'125	3'129	3'153	3'159	3'143	3'124	3'108	3'008	3'092	3'091	3'096
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	2'731	2'721	2'768	2'632	2'611	2'517	2'507	2'486	2'440	2'434	2'416	2'390
	8	2'297	2'312	2'340	2'358	2'378	2'359	2'367	2'363	2'364	2'381	2'394	2'421
	9	2'579	2'603	2'619	2'676	2'719	2'705	2'708	2'726	2'742	2'746	2'746	2'749
	10	2'566	2'554	2'462	2'422	2'401	2'358	2'320	2'306	2'306	2'305	2'301	2'303
	11	2'556	2'584	2'616	2'636	2'656	2'659	2'658	2'694	2'677	2'696	2'712	2'698
	12	2'877	2'889	2'905	2'922	2'915	2'929	2'907	2'905	2'871	2'871	2'857	2'859
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	2'924	2'931	2'959	2'984	2'983	2'960	2'940	2'926	2'920	2'926	2'936	2'936
	15	2'893	2'900	2'920	2'922	2'920	2'906	2'872	2'857	2'811	2'842	2'839	2'841
	16	2'795	2'789	2'778	2'781	2'790	2'753	2'732	2'728	2'697	2'686	2'674	2'651
	17	2'544	2'538	2'545	2'563	2'590	2'556	2'553	2'543	2'523	2'509	2'493	2'485
	18	2'388	2'382	2'372	2'340	2'304	2'257	2'245	2'196	2'178	2'158	2'153	2'131
	19	2'028	2'039	2'055	2'075	2'094	2'083	2'081	2'090	2'112	2'144	2'170	2'186
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	2'545	2'613	2'677	2'732	2'790	2'808	2'794	2'802	2'822	2'835	2'856	2'869
	22	2'796	2'802	2'829	2'860	2'880	2'902	2'898	2'912	2'932	2'964	2'998	3'039
	23	3'159	3'180	3'198	3'218	3'238	3'226	3'202	3'198	3'190	3'186	3'184	3'148
	24	2'873	2'841	2'811	2'800	2'759	2'711	2'660	2'654	2'596	2'584	2'582	2'564
	25*	—	—	—	—	—	—	—	—	—	—	—	—
	26	2'895	2'903	2'900	2'905	2'888	2'859	2'780	2'743	2'685	2'639	2'603	2'542
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	2'181	2'177	2'217	2'241	2'232	2'236	2'246	2'245	2'277	2'339	2'381	2'436
	29	2'884	2'902	2'925	2'908	2'896	2'890	2'868	2'868	2'830	2'801	2'787	2'750
	30	2'244	2'254	2'275	2'291	2'334	2'340	2'361	2'355	2'401	2'453	2'494	2'533
	31	2'577	2'587	2'553	2'566	2'554	2'503	2'459	2'443	2'435	2'440	2'410	2'436
Hourly Means	2'6585	2'6657	2'6745	2'6793	2'6853	2'6654	2'6464	2'6408	2'6332	2'6381	2'6390	2'6388	

\* Christmas Day.



		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hour of Mean Greenwich Time	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Toronto Time	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
	1	2'507	2'510	2'516	2'582	2'628	2'608	2'594	2'588	2'581	2'598	2'604	2'571
	2	2'472	2'490	2'530	2'581	2'606	2'621	2'622	2'612	2'616	2'667	2'681	2'692
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	2'813	2'748	2'713	2'656	2'621	2'532	2'471	2'401	2'337	2'283	2'208	2'161
	5	2'036	2'095	2'148	2'181	2'232	2'221	2'213	2'237	2'242	2'260	2'270	2'281
	6	2'580	2'586	2'600	2'615	2'634	2'608	2'578	2'555	2'516	2'538	2'523	2'535
	7	2'005	1'933	1'916	1'917	1'895	1'871	1'891	1'921	1'966	2'008	2'031	2'078
	8	2'410	2'483	2'521	2'559	2'607	2'612	2'615	2'628	2'667	2'708	2'738	2'746
	9	2'852	2'866	2'870	2'858	2'861	2'836	2'798	2'775	2'782	2'794	2'801	2'794
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	2'693	2'688	2'676	2'686	2'687	2'661	2'624	2'591	2'590	2'580	2'589	2'604
	12	2'884	2'907	2'959	3'001	3'024	3'023	3'006	3'025	3'030	3'051	3'062	3'069
	13	2'854	2'854	2'816	2'792	2'752	2'720	2'675	2'612	2'621	2'620	2'596	2'568
	14	2'429	2'411	2'414	2'428	2'430	2'415	2'383	2'339	2'361	2'372	2'382	2'385
	15	2'374	2'328	2'276	2'219	2'172	2'131	2'080	2'069	2'056	2'054	2'066	2'058
	16	2'197	2'248	2'304	2'349	2'402	2'410	2'415	2'429	2'487	2'564	2'624	2'727
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	2'405	2'378	2'383	2'377	2'363	2'336	2'316	2'271	2'276	2'291	2'295	2'307
	19	2'568	2'610	2'678	2'724	2'763	2'782	2'802	2'820	2'860	2'894	2'912	2'950
	20	3'093	3'093	3'093	3'093	3'098	3'076	3'013	2'975	2'962	2'952	2'948	2'922
	21	2'824	2'822	2'836	2'840	2'820	2'816	2'818	2'816	2'828	2'854	2'862	2'881
	22	2'889	2'901	2'904	2'905	2'839	2'871	2'828	2'803	2'780	2'775	2'737	2'701
	23	2'245	2'259	2'291	2'300	2'316	2'321	2'345	2'353	2'388	2'409	2'428	2'439
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	2'902	2'922	2'948	2'958	2'960	2'959	2'941	2'931	2'930	2'917	2'922	2'901
	26	2'411	2'378	2'301	2'295	2'268	2'254	2'236	2'232	2'286	2'357	2'432	2'472
	27	2'867	2'898	2'937	2'956	2'981	2'990	3'001	3'008	3'021	3'051	3'087	3'107
	28	3'218	3'219	3'216	3'232	3'219	3'208	3'163	3'137	3'104	3'090	3'051	3'067
	29	2'638	2'616	2'599	2'593	2'515	2'472	2'370	2'296	2'231	2'189	2'149	2'123
	30	2'207	2'227	2'288	2'312	2'337	2'356	2'372	2'385	2'401	2'429	2'451	2'473
31	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	2'5932	2'5951	2'6075	2'6169	2'6179	2'6051	2'5837	2'5715	2'5761	2'5890	2'5943	2'5982	
FEBRUARY.	1	2'371	2'406	2'428	2'445	2'473	2'483	2'499	2'498	2'521	2'539	2'548	2'543
	2	2'531	2'521	2'520	2'517	2'501	2'488	2'458	2'449	2'431	2'435	2'425	2'411
	3	2'098	2'057	2'017	1'950	1'907	1'857	1'803	1'747	1'734	1'721	1'732	1'741
	4	2'322	2'362	2'406	2'491	2'529	2'545	2'550	2'552	2'561	2'591	2'625	2'617
	5	2'736	2'742	2'717	2'755	2'744	2'742	2'722	2'713	2'711	2'705	2'684	2'680
	6	2'747	2'762	2'779	2'789	2'802	2'788	2'758	2'734	2'725	2'729	2'732	2'726
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	2'257	2'273	2'284	2'282	2'277	2'252	2'240	2'224	2'188	2'175	2'167	2'131
	9	2'159	2'223	2'258	2'291	2'321	2'336	2'342	2'340	2'350	2'364	2'378	2'401
	10	2'451	2'465	2'486	2'507	2'497	2'507	2'491	2'488	2'493	2'511	2'531	2'553
	11	2'630	2'637	2'644	2'662	2'661	2'649	2'633	2'633	2'637	2'637	2'623	2'639
	12	2'171	2'171	2'185	2'201	2'231	2'245	2'244	2'237	2'236	2'256	2'291	2'321
	13	2'734	2'738	2'741	2'724	2'698	2'687	2'652	2'625	2'599	2'595	2'591	2'591
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	2'505	2'563	2'631	2'673	2'724	2'776	2'800	2'808	2'836	2'874	2'906	2'901
	16	2'919	2'903	2'903	2'865	2'838	2'801	2'733	2'661	2'614	2'570	2'540	2'517
	17	2'677	2'694	2'712	2'745	2'745	2'768	2'760	2'755	2'757	2'756	2'769	2'763
	18	2'893	2'893	2'919	2'931	2'925	2'905	2'888	2'851	2'821	2'820	2'800	2'792
	19	2'768	2'780	2'821	2'845	2'842	2'870	2'876	2'873	2'876	2'885	2'913	2'907
	20	2'986	3'005	3'015	3'024	3'022	3'026	3'012	3'001	2'989	2'879	2'987	2'995
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	2'452	2'452	2'458	2'472	2'472	2'466	2'463	2'472	2'488	2'505	2'527	2'572
	23	2'891	2'945	2'975	3'007	3'019	3'036	3'026	3'017	3'019	3'017	3'036	3'042
	24	3'083	3'093	3'093	3'100	3'091	3'081	3'056	3'015	2'985	2'978	2'944	2'938
	25	2'816	2'834	2'838	2'846	2'872	2'867	2'872	2'862	2'854	2'863	2'882	2'897
	26	2'995	2'991	2'990	3'012	2'991	2'973	2'921	2'906	2'891	2'864	2'867	2'813
	27	2'355	2'301	2'229	2'217	2'167	2'073	1'954	1'925	1'866	1'838	1'818	1'818
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	2'6187	2'6296	2'6420	2'6526	2'6521	2'6467	2'6273	2'6122	2'6043	2'6060	2'6092	2'6120	

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
598	2'604	2'571
667	2'681	2'692
—	—	—
283	2'208	2'161
260	2'270	2'284
538	2'523	2'535
008	2'031	2'078
708	2'738	2'746
791	2'801	2'791
—	—	—
589	2'589	2'604
051	3'062	3'069
620	2'596	2'568
372	2'382	2'385
054	2'066	2'058
564	2'624	2'727
—	—	—
291	2'295	2'307
894	2'912	2'950
052	2'948	2'922
854	2'862	2'881
775	2'737	2'701
409	2'428	2'430
—	—	—
917	2'922	2'901
357	2'432	2'472
051	3'087	3'107
090	3'051	3'007
189	2'149	2'123
429	2'451	2'473
—	—	—
5890	2'5913	2'5983
—	—	—
539	2'548	2'543
435	2'425	2'411
721	1'732	1'714
591	2'625	2'647
705	2'681	2'680
729	2'732	2'726
—	—	—
175	2'167	2'131
364	2'378	2'404
514	2'531	2'553
337	2'623	2'639
591	2'621	2'665
595	2'593	2'591
—	—	—
374	2'906	2'901
570	2'510	2'517
756	2'769	2'763
820	2'800	2'792
885	2'913	2'907
879	2'987	2'985
—	—	—
005	2'527	2'572
017	3'036	3'042
078	2'944	2'938
63	2'882	2'897
464	2'837	2'813
38	1'818	1'818
—	—	—
060	2'6092	2'6120

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	In.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'599	2'479	2'401	2'310	2'306	2'313	2'289	2'316	2'342	2'365	2'395	2'426	2'4737
2'712	2'726	2'724	2'738	2'744	2'753	—	—	—	—	—	—	2'7062
—	—	—	—	—	—	2'937	2'919	2'916	2'887	2'851	2'822	—
2'096	2'056	1'989	1'883	1'858	1'840	1'862	1'914	1'934	1'952	1'968	2'002	2'2218
2'313	2'314	2'340	2'370	2'404	2'426	2'475	2'504	2'542	2'570	2'582	2'564	2'3261
2'327	2'497	2'457	2'393	2'381	2'324	2'275	2'230	2'172	2'141	2'107	2'039	2'4363
2'103	2'130	2'174	2'189	2'208	2'229	2'246	2'274	2'292	2'331	2'367	2'401	2'1050
2'760	2'774	2'796	2'818	2'830	2'829	2'833	2'831	2'843	2'848	2'832	2'842	2'7150
2'791	2'822	2'842	2'839	2'851	2'863	—	—	—	—	—	—	2'8067
—	—	—	—	—	—	2'769	2'757	2'749	2'743	2'740	2'707	—
2'613	2'640	2'656	2'680	2'730	2'746	—	2'771	2'803	2'825	2'851	2'863	2'6895
3'070	3'081	3'072	3'058	3'042	3'044	3'016	2'986	2'968	2'934	2'888	2'838	3'0037
2'746	2'730	2'706	2'668	2'654	2'660	2'618	2'655	2'653	2'665	2'661	2'629	2'5920
2'421	2'427	2'447	2'490	2'476	2'472	2'467	2'485	2'485	2'457	2'429	2'419	2'4270
2'074	2'070	2'022	2'038	2'058	2'052	2'044	2'078	2'099	2'108	2'120	2'160	2'1160
2'777	2'864	2'899	2'930	2'941	2'979	—	—	—	—	—	—	2'5780
—	—	—	—	—	—	2'649	2'602	2'592	2'546	2'498	2'436	—
2'327	2'337	2'350	2'356	2'371	2'393	2'375	2'388	2'431	2'458	2'476	2'494	2'3617
2'972	2'974	2'984	2'995	3'004	3'022	3'029	3'055	3'069	3'079	3'079	3'075	2'9042
2'919	2'917	2'905	2'905	2'887	2'865	2'849	2'835	2'830	2'810	2'820	2'822	2'9451
2'805	2'897	2'886	2'891	2'877	2'893	2'893	2'907	2'900	2'914	2'910	2'881	2'8654
2'661	2'614	2'563	2'543	2'519	2'465	2'435	2'363	2'339	2'311	2'285	2'243	2'6364
2'462	2'483	2'486	2'484	2'482	2'486	—	—	—	—	—	—	2'5072
—	—	—	—	—	—	2'841	2'853	2'863	2'867	2'882	2'888	—
2'896	2'894	2'864	2'839	2'811	2'766	2'736	2'692	2'658	2'626	2'557	2'481	2'8338
2'526	2'578	2'605	2'654	2'663	2'693	2'717	2'756	2'777	2'795	2'813	2'838	2'5142
3'145	3'154	3'181	3'205	3'208	3'220	3'248	3'252	3'272	3'258	3'227	3'200	3'1032
3'002	2'948	2'910	2'884	2'858	2'834	2'802	2'770	2'758	2'743	2'701	2'666	2'9893
2'097	2'079	2'055	2'033	2'025	2'029	2'035	2'010	2'063	2'099	2'141	—	2'2371
2'500	2'506	2'516	2'511	2'524	—	—	—	—	—	—	—	2'3911
—	—	—	—	—	—	2'337	2'335	2'335	2'347	2'354	2'356	—
2'6011	2'6073	2'6012	2'5963	2'5967	2'5971	2'5843	2'5911	2'5960	2'5954	2'5899	2'5813	2'5954
—	—	—	—	—	—	—	—	—	—	—	—	—
2'570	2'566	2'582	2'618	2'642	2'603	2'598	2'600	2'604	2'589	2'562	2'549	2'5349
2'394	2'390	2'374	2'369	2'369	2'356	2'328	2'308	2'302	2'280	2'247	2'210	2'3977
1'791	1'835	1'862	1'995	1'970	2'019	2'039	2'083	2'158	2'210	2'257	2'290	1'9498
2'675	2'695	2'707	2'715	2'721	2'719	2'724	2'707	2'700	2'722	2'716	2'732	2'6135
2'685	2'684	2'684	2'676	2'688	2'696	2'695	2'692	2'692	2'722	2'724	2'730	2'7104
2'716	2'694	2'688	2'699	2'709	2'713	—	—	—	—	—	—	—
—	—	—	—	—	—	2'204	2'198	2'209	2'213	2'233	2'247	2'6081
2'117	2'115	2'109	2'035	2'015	1'981	1'957	1'971	1'983	2'017	2'039	2'095	2'1326
2'426	2'426	2'432	2'441	2'443	2'455	2'443	2'445	2'447	2'454	2'442	2'449	2'3780
2'561	2'572	2'583	2'596	2'613	2'624	2'632	2'621	2'612	2'608	2'617	2'629	2'5524
2'615	2'639	2'627	2'595	2'575	2'553	2'541	2'530	2'528	2'502	2'493	2'470	2'5993
2'679	2'692	2'717	2'734	2'740	2'727	2'733	2'732	2'740	2'726	2'722	2'732	2'6330
2'603	2'609	2'638	2'645	2'632	2'620	—	—	—	—	—	—	—
—	—	—	—	—	—	2'439	2'434	2'436	2'441	2'455	2'457	2'5994
2'951	2'976	2'976	2'990	2'986	2'981	2'981	2'974	2'973	2'973	2'958	2'937	2'8610
2'495	2'480	2'464	2'470	2'482	2'486	2'506	2'512	2'552	2'580	2'596	2'615	2'6294
2'802	2'826	2'846	2'844	2'847	2'851	2'860	2'871	2'883	2'898	2'900	2'893	2'8022
2'774	2'760	2'771	2'774	2'774	2'772	2'772	2'754	2'748	2'742	2'746	2'768	2'8165
2'929	2'937	2'953	2'969	2'969	2'969	2'967	2'967	2'970	2'974	2'964	2'984	2'9095
2'994	2'985	2'979	2'987	2'990	2'932	—	—	—	—	—	—	2'8620
—	—	—	—	—	—	2'469	2'467	2'467	2'462	2'462	2'454	—
2'594	2'631	2'617	2'689	2'732	2'744	2'758	2'757	2'776	2'799	2'831	2'864	2'6092
3'050	3'058	3'074	3'065	3'053	3'062	3'066	3'073	3'070	3'067	3'073	3'085	3'0317
2'896	2'882	2'859	2'864	2'861	2'860	2'852	2'826	2'797	2'793	2'793	2'803	2'9394
2'902	2'928	2'932	2'947	2'953	2'964	2'965	2'973	2'981	2'982	2'982	3'005	2'9090
2'774	2'742	2'741	2'700	2'676	2'600	2'584	2'558	2'494	2'466	2'448	2'392	2'7652
1'826	1'828	1'822	1'825	1'828	1'831	—	—	—	—	—	—	—
—	—	—	—	—	—	2'191	2'207	2'227	2'239	2'251	2'282	2'0382
2'6188	2'6237	2'6278	2'6313	2'6365	2'6300	2'5960	2'5945	2'5983	2'6025	2'6046	2'6084	2'6202

		BAROMETRIC PRESSURE.										
		Barometer at 32° = 27 English inches + the numbers in the Table.										
Hours of Mean Copenhagen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
MARCH.	1	29.313	29.329	29.391	29.428	29.442	29.479	29.486	29.492	29.491	29.501	29.520
	2	29.779	29.787	29.797	29.810	29.818	29.822	29.815	29.777	29.758	29.758	29.759
	3	29.730	29.731	29.739	29.702	29.690	29.667	29.646	29.636	29.615	29.609	29.593
	4	29.716	29.738	29.761	29.773	29.782	29.797	29.802	29.799	29.791	29.804	29.804
	5	29.969	30.008	30.024	30.026	30.033	30.046	30.026	30.012	30.015	30.002	30.000
	6	30.019	30.062	30.064	30.052	30.051	30.048	30.028	30.009	29.983	29.976	29.967
	7	—	—	—	—	—	—	—	—	—	—	—
	8	29.679	29.716	29.745	29.767	29.792	29.793	29.807	29.801	29.811	29.839	29.845
	9	29.984	29.982	29.988	29.973	29.977	29.959	29.959	29.901	29.885	29.873	29.859
	10	29.683	29.693	29.695	29.713	29.705	29.683	29.672	29.663	29.659	29.658	29.670
	11	29.891	29.923	29.905	29.896	29.890	29.864	29.855	29.824	29.816	29.804	29.791
	12	29.733	29.731	29.736	29.780	29.767	29.730	29.724	29.696	29.686	29.707	29.685
	13	29.694	29.714	29.724	29.740	29.727	29.728	29.722	29.686	29.673	29.668	29.667
	14	—	—	—	—	—	—	—	—	—	—	—
	15	29.742	29.755	29.763	29.752	29.750	29.703	29.712	29.732	29.716	29.718	29.718
	16	29.707	29.714	29.732	29.742	29.748	29.761	29.765	29.771	29.768	29.788	29.793
	17	29.965	30.002	30.008	30.004	30.001	29.988	29.979	29.948	29.922	29.895	29.883
	18	29.763	29.757	29.757	29.746	29.731	29.716	29.705	29.706	29.685	29.682	29.683
	19	29.936	29.950	29.970	29.971	29.976	29.980	29.968	29.955	29.939	29.921	29.916
	20	29.583	29.563	29.517	29.457	29.423	29.378	29.338	29.289	29.229	29.182	29.200
	21	—	—	—	—	—	—	—	—	—	—	—
	22	29.535	29.531	29.507	29.522	29.520	29.511	29.501	29.494	29.492	29.485	29.483
	23	29.313	29.311	29.337	29.291	29.271	29.273	29.279	29.272	29.276	29.297	29.301
	24	29.531	29.553	29.581	29.601	29.610	29.613	29.612	29.622	29.606	29.604	29.583
	25	29.299	29.331	29.318	29.329	29.352	29.373	29.402	29.441	29.461	29.481	29.509
	26	29.572	29.593	29.588	29.578	29.566	29.558	29.571	29.540	29.528	29.518	29.505
	27	29.467	29.472	29.463	29.480	29.471	29.470	29.470	29.468	29.458	29.469	29.483
	28	—	—	—	—	—	—	—	—	—	—	—
	29	29.448	29.438	29.409	29.415	29.435	29.458	29.208	29.247	29.297	29.332	29.370
	30	29.613	29.631	29.635	29.617	29.615	29.646	29.598	29.588	29.556	29.512	29.484
	31	29.691	29.639	29.661	29.708	29.720	29.743	29.749	29.748	29.754	29.760	29.776
Hourly Means		29.6676	29.6810	29.6861	29.6892	29.6890	29.6849	29.6828	29.6708	29.6620	29.6609	29.6603
	1	29.903	29.911	29.903	29.889	29.868	29.850	29.843	29.782	29.736	29.715	29.708
	2	—	—	—	—	—	—	—	—	—	—	—
	3	29.569	29.588	29.602	29.616	29.611	29.605	29.606	29.596	29.596	29.581	29.574
	4	—	—	—	—	—	—	—	—	—	—	—
	5	29.745	29.743	29.742	29.778	29.784	29.781	29.771	29.766	29.768	29.767	29.741
	6	29.287	29.279	29.273	29.226	29.213	29.193	29.174	29.154	29.111	29.073	29.088
	7	29.507	29.531	29.569	29.601	29.619	29.613	29.616	29.618	29.645	29.627	29.628
	8	29.541	29.575	29.525	29.463	29.427	29.382	29.350	29.311	29.275	29.261	29.290
	9	29.623	29.659	29.709	29.707	29.696	29.684	29.681	29.670	29.654	29.616	29.598
	10	29.334	29.341	29.352	29.367	29.377	29.403	29.415	29.407	29.416	29.458	29.477
	11	—	—	—	—	—	—	—	—	—	—	—
	12	29.277	29.301	29.314	29.357	29.386	29.419	29.453	29.475	29.503	29.510	29.528
	13	29.757	29.747	29.744	29.760	29.757	29.733	29.705	29.677	29.646	29.627	29.615
	14	29.665	29.683	29.698	29.700	29.707	29.703	29.680	29.664	29.622	29.598	29.561
	15	29.626	29.632	29.632	29.646	29.668	29.663	29.661	29.669	29.661	29.661	29.672
	16	29.740	29.740	29.740	29.729	29.749	29.665	29.649	29.563	29.489	29.465	29.407
	17	29.424	29.452	29.462	29.490	29.496	29.504	29.516	29.530	29.538	29.546	29.551
	18	—	—	—	—	—	—	—	—	—	—	—
	19	29.978	29.972	29.949	29.943	29.930	29.916	29.889	29.868	29.847	29.836	29.821
	20	29.838	29.837	29.837	29.849	29.815	29.835	29.760	29.766	29.749	29.740	29.704
	21	29.549	29.540	29.556	29.546	29.545	29.501	29.481	29.486	29.482	29.499	29.478
	22	29.574	29.592	29.603	29.632	29.641	29.653	29.607	29.684	29.684	29.682	29.694
	23	29.869	29.884	29.896	29.919	29.934	29.941	29.949	29.956	29.945	29.938	29.945
	24	29.963	30.005	30.011	30.026	30.029	30.033	30.035	30.038	30.022	30.006	29.989
	25	—	—	—	—	—	—	—	—	—	—	—
	26	29.500	29.490	29.496	29.490	29.481	29.466	29.456	29.440	29.443	29.407	29.396
	27	29.155	29.190	29.240	29.306	29.352	29.382	29.393	29.413	29.425	29.449	29.477
	28	29.608	29.628	29.653	29.633	29.629	29.603	29.575	29.549	29.483	29.449	29.401
	29	29.178	29.169	29.147	29.146	29.128	29.097	29.077	29.093	29.112	29.110	29.134
	30	29.317	29.318	29.338	29.367	29.384	29.375	29.371	29.391	29.383	29.392	29.428
Hourly Means		29.5812	29.5936	29.6010	29.6050	29.6067	29.6002	29.5909	29.5826	29.5682	29.5606	29.5564

\* Good Friday.

BAROMETRIC PRESSURE.  
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
0.01	2'520	2'539	2'557	2'575	2'579	2'579	2'579	2'599	2'615	2'629	2'678	2'700	2'704	2'745	2'5397
0.58	2'759	2'765	2'761	2'758	2'764	2'780	2'788	2'778	2'776	2'768	2'768	2'750	2'748	2'742	2'7761
0.99	2'593	2'593	2'591	2'607	2'607	2'591	2'591	2'621	2'614	2'625	2'632	2'630	2'621	2'693	2'6407
1.04	2'801	2'813	2'829	2'829	2'838	2'867	2'888	2'893	2'893	2'920	2'919	2'934	2'941	2'916	2'8368
1.02	3'000	3'007	3'013	3'010	2'996	3'016	3'010	3'011	3'015	3'013	3'014	3'010	3'014	3'041	3'0138
1.076	2'948	2'967	2'890	2'867	2'832	2'798	2'763	2'747	—	—	—	—	—	—	—
1.39	—	—	2'866	2'887	2'908	2'967	2'964	2'967	2'532	2'558	2'569	2'587	2'616	2'611	2'8570
1.73	2'815	2'851	2'815	2'756	2'712	2'691	2'672	2'666	2'963	2'988	2'961	2'965	2'970	2'981	2'8683
1.73	2'859	2'821	2'815	2'756	2'712	2'691	2'672	2'666	2'612	2'637	2'635	2'629	2'655	2'655	2'8054
1.58	2'670	2'692	2'706	2'719	2'744	2'810	2'830	2'843	2'850	2'884	2'892	2'886	2'894	2'898	2'7559
1.04	2'791	2'795	2'782	2'780	2'775	2'768	2'756	2'747	2'742	2'742	2'741	2'732	2'731	2'730	2'8033
1.07	5'685	2'653	2'641	2'611	2'633	2'607	2'601	2'596	2'593	2'608	2'621	2'621	2'616	2'680	2'6704
1.068	2'667	2'678	2'676	2'672	2'679	2'694	2'701	2'705	—	—	—	—	—	—	—
1.18	—	—	2'716	2'732	2'710	2'733	2'741	2'722	2'658	2'684	2'691	2'705	2'711	2'736	2'6973
1.88	2'793	2'799	2'829	2'851	2'886	2'899	2'907	2'911	2'706	2'709	2'699	2'689	2'701	2'705	2'7247
1.95	2'883	2'877	2'867	2'875	2'881	2'877	2'865	2'851	2'932	2'943	2'951	2'951	2'957	2'960	2'8363
1.82	2'683	2'723	2'767	2'802	2'819	2'817	2'841	2'839	2'817	2'829	2'817	2'785	2'781	2'771	2'765
1.21	2'916	2'901	2'896	2'884	2'849	2'829	2'813	2'809	2'841	2'811	2'879	2'886	2'910	2'937	2'7845
1.82	2'200	2'171	2'151	2'147	2'196	2'216	2'272	2'316	2'726	2'780	2'726	2'689	2'651	2'615	2'581
1.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1.07	2'483	2'487	2'497	2'480	2'482	2'482	2'480	2'476	2'601	2'580	2'563	2'543	2'531	2'523	2'3751
1.94	2'301	2'321	2'331	2'353	2'355	2'371	2'394	2'424	2'436	2'436	2'410	2'392	2'383	2'355	2'4751
1.07	2'583	2'576	2'561	2'561	2'565	2'551	2'529	2'500	2'438	2'434	2'434	2'416	2'465	2'481	2'3557
1.81	2'599	2'577	2'551	2'562	2'562	2'583	2'578	2'571	2'412	2'357	2'357	2'281	2'272	2'278	2'5170
1.18	2'505	2'502	2'507	2'504	2'511	2'493	2'498	2'484	2'569	2'553	2'563	2'543	2'576	2'590	2'4845
1.69	2'483	2'501	2'517	2'531	2'551	2'577	2'594	2'586	2'468	2'459	2'424	2'432	2'436	2'441	2'5113
1.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1.62	2'370	2'432	2'465	2'517	2'546	2'579	2'591	2'603	2'411	2'391	2'335	2'275	2'230	2'113	2'4517
1.00	2'481	2'498	2'493	2'437	2'449	2'426	2'422	2'429	2'605	2'606	2'591	2'591	2'588	2'589	2'3985
1.00	2'776	2'791	2'820	2'818	2'812	2'819	2'855	2'871	2'424	2'426	2'470	2'501	2'517	2'569	2'5257
1.009	2'6603	2'6647	2'6899	2'6713	2'6767	2'6846	2'6850	2'6877	2'881	2'854	2'858	2'877	2'891	2'897	2'7891
1.5	2'708	2'680	2'670	2'633	2'617	2'553	2'517	2'483	2'601	2'580	2'563	2'543	2'531	2'523	2'3751
1.81	2'574	2'569	2'575	2'571	2'595	2'572	2'565	2'561	2'525	2'525	2'529	2'533	2'529	2'549	2'6845
1.7	2'741	2'730	2'708	2'666	2'667	2'635	2'617	2'590	2'707	2'707	2'711	2'690	2'672	2'709	2'6146
1.73	2'088	2'126	2'170	2'222	2'273	2'305	2'326	2'338	2'497	2'497	2'409	2'391	2'335	2'313	2'6432
1.7	2'628	2'649	2'661	2'660	2'656	2'664	2'665	2'660	2'352	2'368	2'381	2'411	2'441	2'463	2'2600
1.41	2'261	2'290	2'314	2'346	2'375	2'396	2'401	2'439	2'633	2'634	2'601	2'579	2'595	2'565	2'6292
1.6	2'598	2'572	2'546	2'504	2'507	2'493	2'466	2'446	2'458	2'471	2'493	2'509	2'529	2'537	2'4140
1.8	2'477	2'513	2'539	2'547	2'590	2'611	2'626	2'627	2'421	2'385	2'350	2'321	2'309	2'312	2'5388
1.0	2'528	2'566	2'606	2'619	2'616	2'675	2'675	2'675	2'477	2'433	2'368	2'321	2'301	2'289	2'4412
1.7	2'615	2'601	2'600	2'590	2'596	2'596	2'580	2'592	2'707	2'718	2'716	2'716	2'716	2'731	2'5537
1.8	2'561	2'561	2'561	2'547	2'565	2'568	2'574	2'599	2'561	2'587	2'633	2'637	2'639	2'639	2'6480
1.1	2'661	2'672	2'691	2'703	2'719	2'721	2'722	2'723	2'575	2'579	2'603	2'601	2'589	2'580	2'6147
1.5	2'455	2'407	2'389	2'371	2'369	2'351	2'375	2'367	2'724	2'724	2'724	2'725	2'723	2'726	2'6867
1.6	2'551	2'571	2'591	2'621	2'660	2'674	2'711	2'712	2'361	2'361	2'377	2'365	2'371	2'409	2'4924
1.6	2'823	2'821	2'841	2'836	2'856	2'870	2'852	2'862	3'003	3'003	3'005	3'001	2'991	2'979	2'6681
1.0	2'704	2'711	2'714	2'680	2'673	2'649	2'628	2'578	2'860	2'856	2'838	2'836	2'818	2'824	2'8718
1.9	2'478	2'481	2'492	2'509	2'510	2'522	2'522	2'524	2'566	2'510	2'500	2'516	2'516	2'516	2'6846
1.8	2'694	2'687	2'688	2'703	2'705	2'704	2'709	2'712	2'544	2'542	2'510	2'518	2'534	2'542	2'5165
1.8	2'945	2'947	2'949	2'964	2'972	2'981	2'970	2'979	2'738	2'749	2'761	2'784	2'795	2'841	2'6951
1.6	2'989	2'988	2'988	2'976	2'976	2'989	2'978	2'991	2'983	2'987	2'985	2'980	2'981	2'980	2'9513
1.7	2'396	2'408	2'382	2'348	2'330	2'268	2'225	2'158	—	—	—	—	—	—	—
1.9	2'465	2'477	2'507	2'520	2'539	2'524	2'523	2'531	2'573	2'543	2'515	2'499	2'490	2'475	2'8819
1.0	2'401	2'367	2'349	2'352	2'313	2'275	2'260	2'273	2'096	2'066	2'057	2'086	2'083	2'129	2'3196
1.0	2'134	2'186	2'186	2'186	2'218	2'258	2'272	2'272	2'535	2'539	2'542	2'547	2'563	2'582	2'4458
1.2	2'428	2'463	2'486	2'500	2'529	2'563	2'593	2'607	2'264	2'216	2'197	2'178	2'152	2'146	2'3968
1.06	2'5564	2'5617	2'5687	2'5694	2'5812	2'5786	2'5746	2'5688	2'259	2'265	2'259	2'265	2'275	2'283	2'1952
									2'619	2'617	2'629	2'617	2'621	2'630	2'4893
									2'5629	2'5555	2'5477	2'5456	2'5427	2'5510	2'5731

		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
	1	2'636	2'658	2'660	2'670	2'677	2'698	2'665	2'648	2'641	2'641	2'615	2'606
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	2'616	2'617	2'620	2'643	2'654	2'662	2'691	2'697	2'705	2'723	2'745	2'750
	4	2'906	2'917	2'916	2'920	2'933	2'907	2'903	2'870	2'861	2'847	2'847	2'847
	5	2'953	2'959	2'966	2'965	2'970	2'959	2'942	2'925	2'894	2'875	2'859	2'848
	6	2'852	2'863	2'860	2'845	2'818	2'802	2'774	2'745	2'722	2'701	2'699	2'679
	7	2'515	2'509	2'490	2'465	2'452	2'431	2'396	2'361	2'331	2'313	2'288	2'286
	8	2'140	2'148	2'138	2'140	2'138	2'137	2'139	2'149	2'156	2'151	2'168	2'153
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	2'622	2'636	2'641	2'641	2'640	2'641	2'631	2'592	2'567	2'549	2'542	2'545
	11	2'526	2'538	2'530	2'506	2'505	2'497	2'487	2'481	2'468	2'458	2'445	2'435
	12	2'405	2'413	2'407	2'412	2'410	2'419	2'415	2'416	2'418	2'432	2'432	2'436
	13	2'648	2'667	2'684	2'699	2'714	2'712	2'706	2'702	2'687	2'673	2'673	2'691
	14	2'714	2'732	2'752	2'760	2'763	2'772	2'778	2'761	2'757	2'743	2'737	2'727
	15	2'760	2'767	2'779	2'778	2'776	2'770	2'761	2'748	2'735	2'716	2'711	2'707
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	2'537	2'545	2'541	2'538	2'534	2'532	2'525	2'511	2'489	2'480	2'472	2'462
	18	2'479	2'483	2'487	2'474	2'484	2'484	2'475	2'460	2'445	2'432	2'424	2'426
	19	2'519	2'523	2'533	2'544	2'559	2'565	2'570	2'566	2'555	2'566	2'561	2'561
	20	2'683	2'686	2'702	2'716	2'718	2'709	2'706	2'725	2'689	2'681	2'673	2'648
	21	2'586	2'590	2'554	2'538	2'536	2'520	2'509	2'451	2'418	2'388	2'355	2'353
	22	2'285	2'287	2'294	2'314	2'331	2'337	2'341	2'365	2'376	2'373	2'387	2'381
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	2'543	2'559	2'555	2'563	2'553	2'549	2'543	2'544	2'516	2'501	2'495	2'499
	25	2'490	2'481	2'466	2'454	2'440	2'423	2'397	2'342	2'318	2'318	2'333	2'322
	26	2'694	2'713	2'745	2'757	2'773	2'773	2'772	2'784	2'780	2'758	2'758	2'732
	27	2'826	2'844	2'825	2'824	2'812	2'809	2'778	2'755	2'743	2'730	2'723	2'712
	28	2'754	2'773	2'763	2'723	2'718	2'704	2'681	2'660	2'658	2'641	2'632	2'624
	29	2'594	2'584	2'580	2'548	2'524	2'510	2'521	2'483	2'497	2'462	2'463	2'472
	30	—	—	—	—	—	—	—	—	—	—	—	—
31	2'547	2'544	2'563	2'548	2'552	2'542	2'541	2'535	2'525	2'518	2'512	2'525	
Hourly Means	2'6086	2'6160	2'6177	2'6144	2'6155	2'6102	2'6018	2'5865	2'5762	2'5655	2'5597	2'5550	
JUNE.	1	2'463	2'468	2'487	2'461	2'466	2'457	2'461	2'448	2'436	2'457	2'447	2'435
	2	2'580	2'620	2'644	2'678	2'679	2'678	2'691	2'666	2'678	2'672	2'676	2'643
	3	2'607	2'621	2'621	2'580	2'566	2'563	2'550	2'505	2'495	2'469	2'460	2'434
	4	2'358	2'354	2'360	2'374	2'390	2'399	2'415	2'433	2'447	2'473	2'515	2'539
	5	2'665	2'686	2'700	2'702	2'701	2'694	2'678	2'681	2'679	2'685	2'697	2'697
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	2'798	2'802	2'799	2'819	2'814	2'808	2'783	2'764	2'741	2'741	2'718	2'691
	8	2'650	2'638	2'690	2'672	2'692	2'663	2'668	2'659	2'651	2'643	2'630	2'636
	9	2'517	2'504	2'505	2'492	2'527	2'466	2'449	2'432	2'422	2'371	2'375	2'356
	10	2'320	2'318	2'298	2'294	2'284	2'284	2'280	2'257	2'250	2'231	2'211	2'207
	11	2'135	2'133	2'133	2'137	2'126	2'111	2'129	2'115	2'157	2'149	2'168	2'191
	12	2'455	2'467	2'472	2'474	2'480	2'492	2'480	2'451	2'434	2'413	2'399	2'392
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	2'021	2'020	2'060	2'072	2'097	2'125	2'163	2'195	2'238	2'254	2'276	2'292
	15	2'358	2'373	2'379	2'401	2'423	2'450	2'463	2'474	2'474	2'480	2'485	2'502
	16	2'651	2'658	2'658	2'657	2'658	2'671	2'689	2'699	2'698	2'711	2'714	2'713
	17	2'858	2'872	2'875	2'876	2'881	2'883	2'871	2'882	2'876	2'880	2'868	2'839
	18	2'800	2'788	2'778	2'774	2'751	2'741	2'710	2'663	2'632	2'604	2'584	2'565
	19	2'441	2'433	2'403	2'385	2'372	2'364	2'371	2'395	2'427	2'434	2'438	2'431
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	2'538	2'545	2'549	2'547	2'542	2'541	2'534	2'522	2'526	2'522	2'521	2'511
	22	2'611	2'618	2'632	2'644	2'651	2'647	2'638	2'636	2'629	2'635	2'647	2'611
	23	2'741	2'757	2'772	2'772	2'770	2'769	2'761	2'749	2'737	2'730	2'722	2'723
	24	2'844	2'862	2'869	2'862	2'849	2'844	2'831	2'827	2'817	2'804	2'794	2'778
	25	2'761	2'771	2'777	2'764	2'762	2'760	2'749	2'726	2'707	2'680	2'665	2'657
	26	2'695	2'701	2'715	2'712	2'704	2'691	2'681	2'663	2'650	2'638	2'627	2'613
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	2'628	2'636	2'644	2'639	2'633	2'646	2'631	2'616	2'603	2'585	2'567	2'563
	29	2'593	2'596	2'598	2'583	2'584	2'577	2'573	2'577	2'564	2'564	2'556	2'539
	30	2'659	2'674	2'681	2'696	2'691	2'690	2'683	2'676	2'658	2'652	2'641	2'639
Hourly Means	2'5694	2'5758	2'5807	2'5795	2'5805	2'5775	2'5738	2'5658	2'5622	2'5568	2'5538	2'5480	

BAROMETRIC PRESSURE.

Barometer at 32° = 27 English inches + the numbers in the Table.

	10	11
	In.	In.
44	2'615	2'606
41	2'745	2'750
47	2'847	2'847
75	2'859	2'848
01	2'699	2'679
13	2'288	2'286
54	2'168	2'153
19	2'542	2'545
58	2'445	2'435
32	2'432	2'436
72	2'673	2'691
43	2'737	2'727
16	2'711	2'707
80	2'472	2'462
32	2'424	2'426
66	2'563	2'561
81	2'673	2'648
88	2'355	2'353
73	2'387	2'381
01	2'495	2'499
58	2'333	2'322
18	2'728	2'732
30	2'723	2'712
11	2'632	2'621
92	2'463	2'452
48	2'512	2'525
55	2'5597	2'5550
57	2'417	2'435
72	2'676	2'643
39	2'460	2'434
73	2'515	2'539
85	2'697	2'695
41	2'718	2'691
43	2'630	2'636
71	2'375	2'356
91	2'211	2'207
99	2'168	2'191
3	2'399	2'392
4	2'276	2'292
0	2'485	2'502
0	2'713	2'713
0	2'868	2'839
1	2'584	2'565
4	2'438	2'431
2	2'521	2'511
5	2'647	2'641
0	2'722	2'723
1	2'794	2'778
0	2'665	2'657
8	2'627	2'613
5	2'567	2'563
1	2'556	2'539
2	2'641	2'639
38	2'5338	2'5480

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	In.
2'604	2'591	2'581	2'621	2'633	2'618	—	—	—	—	—	—	2'6199
—	—	—	—	—	—	2'569	2'559	2'553	2'561	2'570	2'602	2'7500
2'762	2'771	2'800	2'810	2'822	2'831	2'833	2'830	2'812	2'846	2'861	2'867	2'8805
2'840	2'835	2'843	2'853	2'856	2'866	2'871	2'874	2'878	2'894	2'900	2'907	2'8800
2'832	2'821	2'830	2'838	2'839	2'840	2'840	2'838	2'831	2'831	2'835	2'831	2'8853
2'663	2'639	2'627	2'631	2'632	2'600	2'599	2'570	2'550	2'535	2'526	2'523	2'6853
2'268	2'263	2'266	2'248	2'238	2'223	2'201	2'177	2'157	2'105	2'129	2'090	2'3601
2'179	2'185	2'216	2'234	2'255	2'277	—	—	—	—	—	—	2'7339
—	—	—	—	—	—	2'574	2'576	2'568	2'569	2'579	2'605	2'5630
2'525	2'525	2'534	2'548	2'545	2'547	2'548	2'504	2'498	2'480	2'488	2'514	2'4543
2'431	2'425	2'426	2'428	2'448	2'443	2'409	2'411	2'419	2'429	2'423	2'396	2'4778
2'460	2'467	2'479	2'494	2'530	2'534	2'554	2'557	2'565	2'580	2'600	2'624	2'6853
2'689	2'689	2'691	2'679	2'681	2'692	2'681	2'665	2'663	2'670	2'675	2'703	2'7382
2'725	2'727	2'737	2'727	2'727	2'724	2'725	2'721	2'714	2'722	2'731	2'743	2'6824
2'702	2'689	2'687	2'710	2'722	2'728	—	—	—	—	—	—	2'5335
—	—	—	—	—	—	2'526	2'513	2'508	2'516	2'521	2'535	2'4820
2'454	2'452	2'441	2'440	2'442	2'447	2'451	2'454	2'453	2'456	2'456	2'456	2'4618
2'425	2'425	2'437	2'464	2'468	2'460	2'466	2'461	2'468	2'477	2'481	2'496	2'5787
2'571	2'573	2'581	2'589	2'593	2'610	2'616	2'615	2'621	2'624	2'632	2'640	2'6536
2'641	2'636	2'641	2'633	2'625	2'627	2'596	2'597	2'590	2'582	2'587	2'583	2'3934
2'331	2'363	2'372	2'371	2'364	2'322	2'298	2'246	2'233	2'233	2'235	2'269	2'4232
2'401	2'442	2'461	2'498	2'491	2'498	—	—	—	—	—	—	2'5149
—	—	—	—	—	—	2'567	2'553	2'543	2'539	2'543	2'542	2'4433
2'509	2'494	2'501	2'525	2'503	2'489	2'497	2'494	2'494	2'491	2'482	2'492	2'7589
2'327	2'336	2'369	2'372	2'366	2'371	2'511	2'530	2'576	2'609	2'626	2'672	2'7539
2'746	2'750	2'758	2'748	2'757	2'759	2'760	2'763	2'761	2'762	2'782	2'788	2'7539
2'712	2'722	2'719	2'737	2'741	2'740	2'737	2'725	2'718	2'720	2'721	2'738	2'6682
2'624	2'638	2'654	2'661	2'682	2'688	2'624	2'638	2'624	2'639	2'621	2'613	2'5545
2'518	2'510	2'560	2'582	2'622	2'638	—	—	—	—	—	—	2'4084
—	—	—	—	—	—	2'673	2'631	2'599	2'590	2'570	2'540	2'5865
2'525	2'511	2'511	2'489	2'481	2'469	2'451	2'411	2'445	2'443	2'403	2'403	2'5837
2'569	2'5588	2'5661	2'5745	2'5797	2'5811	2'5838	2'5736	2'5712	2'5724	2'5763	2'5865	2'5837
—	—	—	—	—	—	—	—	—	—	—	—	2'4663
2'427	2'425	2'431	2'439	2'447	2'459	2'475	2'480	2'493	2'512	2'526	2'540	2'6376
2'641	2'628	2'636	2'637	2'634	2'635	2'637	2'594	2'582	2'584	2'580	2'609	2'4510
2'424	2'424	2'393	2'381	2'367	2'362	2'338	2'341	2'341	2'331	2'338	2'328	2'5141
2'539	2'559	2'573	2'617	2'620	2'630	2'624	2'607	2'616	2'615	2'630	2'642	2'7204
2'743	2'749	2'753	2'740	2'746	2'751	—	—	—	—	—	—	2'7209
—	—	—	—	—	—	2'733	2'734	2'754	2'754	2'769	2'798	2'695
2'675	2'657	2'673	2'672	2'672	2'664	2'655	2'670	2'667	2'667	2'667	2'667	2'6133
2'592	2'588	2'589	2'591	2'593	2'573	2'561	2'548	2'540	2'532	2'523	2'497	2'4051
2'363	2'355	2'363	2'393	2'385	2'393	2'394	2'355	2'339	2'332	2'324	2'317	2'2111
2'187	2'177	2'179	2'165	2'166	2'163	2'154	2'152	2'122	2'115	2'127	2'129	2'2320
2'227	2'252	2'266	2'287	2'297	2'318	2'327	2'344	2'358	2'358	2'389	2'411	2'3264
2'380	2'381	2'368	2'376	2'386	2'386	—	—	—	—	—	—	2'2459
—	—	—	—	—	—	2'042	2'036	2'018	2'020	2'010	2'021	2'615
2'345	2'327	2'331	2'353	2'355	2'356	2'342	2'340	2'338	2'332	2'344	2'355	2'5141
2'510	2'534	2'544	2'580	2'581	2'591	2'606	2'601	2'624	2'625	2'633	2'645	2'7332
2'729	2'733	2'749	2'768	2'783	2'787	2'801	2'792	2'796	2'811	2'830	2'842	2'8419
2'828	2'822	2'834	2'823	2'809	2'796	2'804	2'803	2'813	2'817	2'798	2'798	2'5860
2'527	2'520	2'500	2'492	2'487	2'486	2'481	2'455	2'437	2'427	2'427	2'432	2'4545
2'425	2'476	2'486	2'512	2'512	2'525	—	—	—	—	—	—	2'5612
—	—	—	—	—	—	2'528	2'514	2'501	2'500	2'508	2'526	2'591
2'501	2'501	2'501	2'515	2'556	2'562	2'562	2'528	2'536	2'558	2'561	2'587	2'5361
2'638	2'647	2'690	2'677	2'667	2'682	2'678	2'678	2'685	2'685	2'706	2'733	2'7657
2'722	2'736	2'733	2'753	2'765	2'777	2'775	2'776	2'789	2'793	2'800	2'824	2'7940
2'765	2'753	2'754	2'756	2'759	2'769	2'757	2'753	2'746	2'754	2'759	2'751	2'7940
2'657	2'643	2'646	2'660	2'669	2'658	2'658	2'647	2'644	2'645	2'643	2'669	2'6923
2'609	2'610	2'616	2'630	2'643	2'649	—	—	—	—	—	—	2'6129
—	—	—	—	—	—	2'594	2'597	2'597	2'594	2'598	2'605	2'5985
2'565	2'568	2'577	2'573	2'574	2'570	2'570	2'570	2'571	2'567	2'567	2'579	2'5860
2'567	2'563	2'570	2'588	2'598	2'601	2'596	2'595	2'596	2'606	2'618	2'641	2'6740
2'643	2'647	2'649	2'656	2'666	2'671	2'677	2'695	2'702	2'704	2'708	2'721	2'5619
2'5470	2'5490	2'5533	2'5640	2'5667	2'5688	2'5514	2'5469	2'5460	2'5483	2'5534	2'5679	2'5619



		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Galtengau Time.		0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time		18	19	20	21	22	23	0	1	2	3	4	5
		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
JULY.	1	27.732	27.745	27.751	27.759	27.760	27.767	27.762	27.758	27.746	27.737	27.726	27.713
	2	27.782	27.795	27.795	27.809	27.816	27.817	27.803	27.791	27.778	27.763	27.763	27.750
	3	27.775	27.797	27.804	27.808	27.797	27.791	27.780	27.763	27.753	27.740	27.729	27.723
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	27.745	27.743	27.743	27.742	27.740	27.737	27.727	27.711	27.692	27.679	27.693	27.689
	6	27.725	27.737	27.745	27.787	27.763	27.756	27.752	27.751	27.746	27.730	27.716	27.700
	7	27.756	27.762	27.761	27.761	27.764	27.751	27.743	27.730	27.722	27.701	27.693	27.691
	8	27.665	27.681	27.688	27.691	27.690	27.671	27.665	27.651	27.643	27.621	27.611	27.606
	9	27.661	27.661	27.660	27.663	27.656	27.647	27.633	27.622	27.614	27.592	27.590	27.580
	10	27.538	27.565	27.574	27.583	27.581	27.581	27.576	27.551	27.541	27.527	27.524	27.506
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	27.549	27.553	27.558	27.572	27.565	27.572	27.566	27.557	27.543	27.518	27.510	27.499
	13	27.528	27.526	27.510	27.530	27.526	27.517	27.514	27.494	27.505	27.506	27.516	27.527
	14	27.685	27.689	27.702	27.701	27.663	27.681	27.667	27.665	27.669	27.663	27.643	27.617
	15	27.593	27.607	27.611	27.607	27.600	27.593	27.588	27.567	27.548	27.530	27.536	27.528
	16	27.601	27.612	27.609	27.611	27.629	27.610	27.595	27.594	27.588	27.571	27.571	27.579
	17	27.617	27.615	27.615	27.611	27.605	27.611	27.601	27.596	27.596	27.610	27.599	27.611
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	27.678	27.682	27.681	27.677	27.611	27.614	27.638	27.623	27.607	27.588	27.585	27.576
	20	27.605	27.607	27.622	27.619	27.615	27.603	27.603	27.577	27.567	27.545	27.545	27.537
	21	27.578	27.581	27.586	27.528	27.524	27.495	27.477	27.465	27.445	27.445	27.406	27.426
	22	27.547	27.526	27.550	27.572	27.576	27.599	27.599	27.610	27.608	27.605	27.607	27.619
	23	27.847	27.871	27.879	27.881	27.882	27.886	27.885	27.881	27.863	27.853	27.835	27.812
	24	27.837	27.831	27.839	27.829	27.839	27.822	27.802	27.786	27.772	27.733	27.717	27.705
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	27.439	27.469	27.518	27.513	27.554	27.601	27.617	27.613	27.621	27.623	27.621	27.629
	27	27.777	27.797	27.809	27.811	27.822	27.828	27.828	27.817	27.807	27.799	27.783	27.785
	28	27.765	27.761	27.762	27.757	27.757	27.734	27.728	27.709	27.690	27.670	27.661	27.649
	29	27.578	27.574	27.564	27.555	27.544	27.511	27.507	27.483	27.454	27.442	27.443	27.423
	30	27.482	27.486	27.492	27.491	27.506	27.496	27.496	27.482	27.478	27.462	27.458	27.453
	31	27.486	27.496	27.490	27.497	27.481	27.481	27.476	27.463	27.463	27.477	27.483	27.499
Aug. 1		—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		27.6183	27.6365	27.6656	27.6665	27.6640	27.6594	27.6526	27.6414	27.6309	27.6186	27.6135	27.6082
AUGUST.	1	27.732	27.740	27.760	27.777	27.785	27.778	27.775	27.750	27.746	27.731	27.747	27.742
	2	27.769	27.801	27.799	27.805	27.810	27.791	27.777	27.773	27.760	27.757	27.752	27.751
	3	27.726	27.745	27.745	27.743	27.741	27.698	27.672	27.666	27.643	27.625	27.603	27.593
	4	27.485	27.481	27.477	27.479	27.495	27.449	27.433	27.409	27.393	27.368	27.355	27.329
	5	27.293	27.302	27.314	27.316	27.317	27.319	27.320	27.328	27.328	27.315	27.338	27.333
	6	27.497	27.523	27.542	27.547	27.551	27.540	27.540	27.544	27.543	27.534	27.540	27.550
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	27.762	27.796	27.796	27.798	27.809	27.809	27.799	27.796	27.789	27.783	27.780	27.783
	10	27.810	27.816	27.826	27.838	27.835	27.821	27.812	27.801	27.777	27.761	27.767	27.753
	11	27.747	27.751	27.752	27.765	27.761	27.762	27.753	27.759	27.753	27.739	27.721	27.736
	12	27.768	27.780	27.792	27.792	27.793	27.788	27.763	27.763	27.734	27.741	27.713	27.701
	13	27.714	27.724	27.717	27.703	27.709	27.697	27.674	27.658	27.640	27.624	27.610	27.606
	14	27.575	27.583	27.583	27.600	27.591	27.592	27.583	27.576	27.572	27.560	27.549	27.570
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	27.581	27.579	27.582	27.591	27.602	27.596	27.595	27.583	27.572	27.572	27.536	27.520
	17	27.458	27.451	27.451	27.437	27.445	27.428	27.361	27.395	27.363	27.344	27.362	27.343
	18	27.431	27.445	27.447	27.455	27.457	27.460	27.461	27.471	27.465	27.463	27.496	27.520
	19	27.558	27.560	27.577	27.559	27.556	27.540	27.532	27.526	27.518	27.517	27.521	27.521
	20	27.534	27.534	27.526	27.523	27.521	27.491	27.468	27.460	27.447	27.439	27.458	27.483
	21	27.555	27.559	27.564	27.569	27.571	27.574	27.562	27.562	27.556	27.549	27.554	27.559
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	27.788	27.795	27.800	27.812	27.818	27.813	27.801	27.797	27.771	27.773	27.770	27.758
	24	27.867	27.872	27.883	27.899	27.907	27.902	27.895	27.891	27.880	27.878	27.874	27.871
	25	27.929	27.929	27.953	27.946	27.941	27.941	27.924	27.910	27.915	27.891	27.869	27.863
	26	27.577	27.747	27.733	27.717	27.716	27.679	27.662	27.646	27.616	27.593	27.581	27.558
	27	27.575	27.591	27.594	27.617	27.631	27.639	27.627	27.633	27.622	27.620	27.613	27.610
	28	27.658	27.666	27.665	27.672	27.667	27.663	27.653	27.647	27.630	27.618	27.608	27.610
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	27.682	27.674	27.664	27.655	27.640	27.629	27.612	27.603	27.585	27.583	27.567	27.591
	31	27.765	27.789	27.801	27.814	27.824	27.816	27.800	27.788	27.784	27.765	27.755	27.753
Hourly Means		27.6556	27.6619	27.6660	27.6692	27.6714	27.6623	27.6485	27.6437	27.6308	27.6212	27.6169	27.6158



		BAROMETRIC PRESSURE.												
		Barometer at 32° = 27 English inches + the numbers in the Table.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11		
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5		
SEPTEMBER.	1	In. 2'669	In. 2'669	In. 2'671	In. 2'670	In. 2'661	In. 2'617	In. 2'638	In. 2'639	In. 2'622	In. 2'615	In. 2'602	In. 2'598	
	2	2'665	2'675	2'683	2'686	2'688	2'681	2'675	2'669	2'659	2'641	2'610	2'600	
	3	2'542	2'540	2'510	2'512	2'529	2'525	2'517	2'510	2'499	2'478	2'512	2'542	
	4	2'675	2'687	2'688	2'688	2'686	2'676	2'666	2'611	2'634	2'601	2'594	2'594	
	5	—	—	—	—	—	—	—	—	—	—	—	—	
	6	2'711	2'713	2'735	2'762	2'763	2'752	2'752	2'753	2'741	2'711	2'746	2'749	
	7	2'787	2'787	2'787	2'770	2'760	2'735	2'728	2'718	2'700	2'659	2'653	2'635	
	8	2'498	2'482	2'471	2'457	2'451	2'438	2'422	2'412	2'381	2'359	2'344	2'335	
	9	2'623	2'639	2'668	2'700	2'710	2'718	2'721	2'726	2'722	2'722	2'722	2'727	
	10	2'903	2'912	2'932	2'950	2'959	2'969	2'971	2'996	2'965	2'960	2'968	2'967	
	11	2'995	2'995	2'995	3'007	2'988	2'957	2'911	2'925	2'908	2'888	2'867	2'850	
	12	—	—	—	—	—	—	—	—	—	—	—	—	
	13	2'581	2'583	2'589	2'595	2'601	2'603	2'602	2'600	2'602	2'617	2'630	2'636	
	14	2'764	2'772	2'779	2'794	2'796	2'811	2'814	2'803	2'789	2'785	2'786	2'789	
	15	2'893	2'901	2'906	2'901	2'894	2'882	2'853	2'810	2'818	2'805	2'796	2'780	
	16	2'782	2'782	2'782	2'783	2'768	2'719	2'727	2'697	2'683	2'676	2'671	2'673	
	17	2'620	2'620	2'610	2'611	2'608	2'600	2'597	2'581	2'568	2'558	2'533	2'531	
	18	2'445	2'417	2'439	2'439	2'433	2'439	2'425	2'428	2'428	2'420	2'432	2'430	
	19	—	—	—	—	—	—	—	—	—	—	—	—	
	20	2'436	2'442	2'446	2'454	2'462	2'461	2'465	2'462	2'459	2'467	2'471	2'481	
	21	2'575	2'594	2'598	2'618	2'632	2'631	2'637	2'645	2'637	2'643	2'650	2'655	
	22	2'795	2'801	2'806	2'808	2'815	2'823	2'800	2'791	2'784	2'759	2'765	2'745	
	23	2'720	2'720	2'723	2'729	2'720	2'709	2'695	2'667	2'651	2'636	2'637	2'634	
	24	2'659	2'663	2'665	2'667	2'663	2'647	2'637	2'623	2'619	2'615	2'609	2'603	
	25	2'607	2'609	2'620	2'621	2'635	2'639	2'624	2'624	2'612	2'622	2'632	2'626	
	26	—	—	—	—	—	—	—	—	—	—	—	—	
	27	2'298	2'303	2'300	2'302	2'293	2'279	2'268	2'255	2'231	2'226	2'210	2'182	
	28	2'292	2'290	2'301	2'305	2'303	2'306	2'302	2'322	2'318	2'327	2'328	2'349	
	29	2'345	2'363	2'351	2'351	2'351	2'337	2'325	2'298	2'317	2'297	2'287	2'298	
	30	2'380	2'406	2'419	2'426	2'433	2'426	2'410	2'405	2'404	2'397	2'392	2'390	
Hourly Means	2'6254	2'6306	2'6350	2'6400	2'6385	2'6321	2'6238	2'6156	2'6060	2'5968	2'5851	2'5907		
OCTOBER.	1	2'309	2'328	2'359	2'378	2'399	2'432	2'459	2'467	2'477	2'486	2'498	2'516	
	2	2'691	2'718	2'725	2'748	2'751	2'750	2'741	2'730	2'723	2'732	2'745	2'745	
	3	—	—	—	—	—	—	—	—	—	—	—	—	
	4	2'763	2'753	2'756	2'752	2'746	2'745	2'710	2'667	2'624	2'630	2'608	2'594	
	5	2'299	2'301	2'263	2'267	2'265	2'252	2'251	2'248	2'249	2'246	2'257	2'270	
	6	2'396	2'428	2'446	2'466	2'478	2'492	2'497	2'509	2'519	2'523	2'511	2'540	
	7	2'581	2'597	2'595	2'597	2'589	2'580	2'571	2'541	2'529	2'513	2'503	2'481	
	8	2'321	2'327	2'323	2'326	2'322	2'299	2'295	2'284	2'281	2'257	2'259	2'249	
	9	2'378	2'382	2'383	2'375	2'359	2'357	2'339	2'300	2'266	2'259	2'244	2'268	
	10	—	—	—	—	—	—	—	—	—	—	—	—	
	11	2'608	2'632	2'650	2'689	2'708	2'706	2'694	2'691	2'671	2'661	2'659	2'655	
	12	2'563	2'547	2'497	2'481	2'441	2'400	2'340	2'290	2'208	2'163	2'117	2'071	
	13	2'093	2'110	2'126	2'150	2'171	2'191	2'201	2'183	2'190	2'205	2'232	2'252	
	14	2'411	2'446	2'469	2'483	2'492	2'517	2'516	2'515	2'525	2'531	2'553	2'571	
	15	2'784	2'804	2'818	2'828	2'838	2'829	2'818	2'810	2'806	2'812	2'810	2'808	
	16	2'763	2'762	2'768	2'755	2'750	2'733	2'683	2'630	2'596	2'577	2'543	2'541	
	17	—	—	—	—	—	—	—	—	—	—	—	—	
	18	2'693	2'697	2'679	2'669	2'616	2'587	2'536	2'510	2'477	2'468	2'464	2'437	
	19	2'690	2'710	2'736	2'736	2'711	2'716	2'731	2'721	2'705	2'704	2'719	2'735	
	20	2'838	2'841	2'854	2'858	2'852	2'831	2'798	2'777	2'761	2'781	2'785	2'797	
	21	2'956	2'962	2'981	2'961	2'939	2'950	2'938	2'898	2'882	2'863	2'840	2'831	
	22	2'629	2'617	2'637	2'663	2'653	2'664	2'670	2'660	2'658	2'672	2'675	2'675	
	23	2'725	2'753	2'783	2'791	2'801	2'799	2'791	2'779	2'766	2'769	2'791	2'819	
	24	—	—	—	—	—	—	—	—	—	—	—	—	
	25	2'314	2'372	2'412	2'420	2'465	2'487	2'504	2'529	2'576	2'615	2'698	2'733	
	26	2'963	2'999	3'031	3'059	3'085	3'106	3'108	3'121	3'137	3'157	3'173	3'185	
	27	3'271	3'282	3'292	3'292	3'290	3'277	3'263	3'241	3'228	3'225	3'225	3'247	
	28	3'343	3'358	3'377	3'389	3'366	3'381	3'367	3'339	3'316	3'293	3'272	3'255	
	29	3'136	3'150	3'156	3'152	3'135	3'120	3'100	3'073	3'063	3'048	3'038	3'011	
	30	2'967	2'970	2'980	2'970	2'962	2'951	2'928	2'908	2'889	2'891	2'889	2'889	
	31	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	2'6737	2'6865	2'6973	2'7021	2'7021	2'6893	2'6866	2'6702	2'6588	2'6577	2'6581	2'6594		

BAROMETRIC PRESSURE.  
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In. 2'615	In. 2'602	In. 2'588	In. 2'603	In. 2'602	In. 2'616	In. 2'612	In. 2'619	In. 2'621	In. 2'622	In. 2'630	In. 2'630	In. 2'631	In. 2'632	In. 2'652	In. 2'632
2'641	2'610	2'598	2'636	2'619	2'610	2'612	2'618	2'607	2'599	2'579	2'588	2'556	2'539	2'528	2'627
2'478	2'512	2'542	2'552	2'590	2'605	2'632	2'655	2'663	2'661	2'656	2'651	2'659	2'660	2'658	2'580
2'601	2'591	2'594	2'574	2'563	2'570	2'546	2'506	2'518	—	—	—	—	—	—	2'6280
—	—	—	—	—	—	—	—	—	2'630	2'639	2'657	2'666	2'677	2'689	—
2'711	2'746	2'749	2'749	2'735	2'747	2'759	2'768	2'763	2'765	2'774	2'770	2'772	2'764	2'793	2'7532
2'639	2'653	2'635	2'627	2'604	2'594	2'578	2'576	2'562	2'560	2'534	2'514	2'498	2'500	2'505	2'6405
2'359	2'341	2'335	2'335	2'335	2'398	2'400	2'466	2'480	2'481	2'521	2'546	2'549	2'568	2'588	2'4175
2'722	2'722	2'727	2'733	2'743	2'770	2'792	2'807	2'814	2'822	2'817	2'823	2'831	2'852	2'859	2'7528
2'660	2'668	2'667	2'663	2'669	2'678	2'673	2'675	2'676	2'679	2'683	2'681	2'682	2'683	2'687	2'9648
2'888	2'867	2'867	2'851	2'831	2'822	2'814	2'817	2'813	—	—	—	—	—	—	2'8222
—	—	—	—	—	—	—	—	—	2'599	2'575	2'575	2'567	2'569	2'569	—
2'617	2'630	2'636	2'652	2'665	2'677	2'701	2'689	2'691	2'695	2'701	2'708	2'708	2'731	2'748	2'6505
2'785	2'786	2'789	2'790	2'802	2'850	2'843	2'839	2'841	2'841	2'855	2'852	2'860	2'861	2'863	2'8153
2'805	2'796	2'780	2'785	2'783	2'787	2'784	2'791	2'789	2'785	2'774	2'766	2'759	2'773	2'782	2'8179
2'676	2'671	2'653	2'659	2'659	2'659	2'654	2'655	2'664	2'644	2'642	2'640	2'637	2'617	2'619	2'6689
2'558	2'533	2'531	2'527	2'538	2'557	2'537	2'529	2'489	2'481	2'482	2'476	2'461	2'442	2'442	2'5422
2'420	2'432	2'430	2'436	2'444	2'446	2'442	2'438	2'431	—	—	—	—	—	—	2'4347
—	—	—	—	—	—	—	—	—	2'448	2'440	2'436	2'415	2'420	2'430	—
2'467	2'471	2'481	2'492	2'510	2'511	2'521	2'523	2'524	2'524	2'524	2'526	2'528	2'534	2'551	2'4908
2'643	2'650	2'655	2'668	2'680	2'697	2'717	2'721	2'720	2'732	2'743	2'744	2'745	2'752	2'753	2'6745
2'759	2'765	2'745	2'746	2'754	2'748	2'745	2'745	2'734	2'732	2'743	2'732	2'725	2'721	2'719	2'7641
2'636	2'637	2'634	2'634	2'640	2'651	2'659	2'647	2'644	2'652	2'654	2'638	2'638	2'632	2'640	2'6655
2'615	2'609	2'603	2'605	2'607	2'611	2'623	2'612	2'610	2'611	2'601	2'596	2'596	2'596	2'602	2'6222
2'622	2'632	2'626	2'614	2'614	2'620	2'624	2'624	2'614	—	—	—	—	—	—	2'5525
—	—	—	—	—	—	—	—	—	2'394	2'376	2'372	2'330	2'321	2'300	—
2'226	2'210	2'182	2'202	2'183	2'184	2'234	2'271	2'299	2'304	2'307	2'292	2'297	2'297	2'307	2'2636
2'327	2'328	2'319	2'361	2'376	2'376	2'376	2'371	2'350	2'348	2'355	2'362	2'349	2'346	2'347	2'3359
2'297	2'287	2'298	2'299	2'303	2'316	2'327	2'330	2'306	2'298	2'305	2'309	2'316	2'335	2'358	2'3217
2'397	2'392	2'390	2'380	2'390	2'390	2'384	2'386	2'343	2'329	2'285	2'257	2'261	2'281	2'295	2'3649
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2'598	2'594	2'597	2'586	2'598	2'607	2'611	2'615	2'609	2'597	2'591	2'592	2'591	2'592	2'594	2'6099
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2'486	2'498	2'516	2'518	2'538	2'556	2'586	2'596	2'599	2'611	2'622	2'629	2'639	2'659	2'670	2'5138
2'732	2'745	2'745	2'751	2'763	2'784	2'793	2'805	2'820	—	—	—	—	—	—	2'7553
—	—	—	—	—	—	—	—	—	2'786	2'780	2'761	2'762	2'762	2'762	—
2'630	2'608	2'594	2'596	2'572	2'528	2'476	2'506	2'480	2'456	2'446	2'437	2'455	2'417	2'427	2'5768
2'246	2'257	2'270	2'283	2'300	2'316	2'342	2'309	2'299	2'295	2'321	2'323	2'325	2'333	2'373	2'2913
2'523	2'541	2'540	2'543	2'564	2'568	2'582	2'574	2'572	2'577	2'575	2'575	2'579	2'573	2'569	2'5286
2'514	2'503	2'481	2'478	2'474	2'472	2'458	2'452	2'400	2'385	2'387	2'365	2'349	2'327	2'327	2'4814
2'257	2'259	2'240	2'235	2'235	2'259	2'290	2'290	2'312	2'336	2'338	2'356	2'357	2'363	2'368	2'3038
2'259	2'244	2'208	2'178	2'154	2'130	2'158	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	2'486	2'495	2'507	2'514	2'514	2'576	2'3297
2'661	2'659	2'655	2'667	2'682	2'687	2'690	2'688	2'680	2'676	2'645	2'642	2'629	2'619	2'607	2'6642
2'163	2'117	2'071	2'063	2'047	2'043	2'011	2'018	2'030	2'031	2'035	2'035	2'043	2'063	2'074	2'1922
2'205	2'232	2'232	2'280	2'293	2'295	2'295	2'295	2'338	2'344	2'358	2'361	2'367	2'379	2'391	2'2555
2'531	2'553	2'551	2'585	2'622	2'647	2'670	2'679	2'691	2'696	2'711	2'719	2'726	2'747	2'761	2'5952
2'812	2'810	2'808	2'806	2'796	2'782	2'792	2'797	2'777	2'792	2'796	2'802	2'782	2'782	2'777	2'8019
2'577	2'543	2'541	2'521	2'529	2'502	2'505	2'497	2'491	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	2'731	2'726	2'732	2'736	2'732	2'728	2'6472
2'468	2'461	2'437	2'447	2'446	2'443	2'458	2'482	2'510	2'534	2'576	2'600	2'616	2'610	2'677	2'5488
2'701	2'719	2'735	2'755	2'760	2'760	2'767	2'804	2'801	2'800	2'804	2'805	2'808	2'819	2'836	2'7595
2'781	2'785	2'797	2'821	2'837	2'860	2'879	2'887	2'898	2'902	2'909	2'916	2'933	2'943	2'959	2'8551
2'863	2'840	2'831	2'840	2'791	2'762	2'756	2'740	2'708	2'695	2'687	2'678	2'638	2'638	2'632	2'8138
2'672	2'675	2'675	2'683	2'684	2'682	2'709	2'727	2'703	2'686	2'683	2'681	2'695	2'699	2'710	2'6756
2'769	2'791	2'819	2'821	2'814	2'830	2'833	2'834	2'836	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	2'311	2'298	2'293	2'293	2'304	2'308	—
2'635	2'698	2'753	2'791	2'806	2'824	2'851	2'861	2'872	2'890	2'899	2'907	2'919	2'932	2'949	2'6957
1'57	3'173	3'185	3'204	3'219	3'234	3'257	3'251	3'253	3'256	3'253	3'255	3'245	3'246	3'264	3'1692
2'23	3'225	3'247	3'256	3'264	3'271	3'275	3'273	3'278	3'278	3'276	3'274	3'305	3'307	3'335	3'2719
2'93	3'272	3'255	3'287	3'249	3'241	3'244	3'246	3'182	3'169	3'168	3'168	3'158	3'158	3'150	3'2640
0'48	3'038	3'011	2'994	3'000	3'004	3'004	2'986	2'993	2'977	2'980	2'988	2'968	2'968	2'976	3'0430
8'91	2'889	2'889	2'889	2'887	2'889	2'874	2'872	2'851	—	—	—	—	—	—	2'8510
—	—	—	—	—	—	—	—	—	2'655	2'653	2'653	2'659	2'667	2'669	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2'698	2'664	2'665	2'698	2'664	2'665	2'674	2'679	2'678	2'667	2'670	2'671	2'669	2'672	2'683	2'6753

BAROMETRIC PRESSURE.													
Barometer at 32° = 27 English inches + the numbers in the Table.													
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
NOVEMBER.	1	In. 2'669	In. 2'694	In. 2'699	In. 2'696	In. 2'703	In. 2'701	In. 2'692	In. 2'686	In. 2'681	In. 2'680	In. 2'680	In. 2'680
	2	2'692	2'695	2'677	2'655	2'649	2'647	2'602	2'582	2'573	2'550	2'544	2'542
	3	2'472	2'472	2'462	2'448	2'450	2'439	2'420	2'397	2'389	2'393	2'403	2'403
	4	2'549	2'561	2'575	2'582	2'574	2'563	2'542	2'534	2'504	2'499	2'495	2'499
	5	2'587	2'584	2'601	2'617	2'621	2'621	2'609	2'602	2'614	2'631	2'630	2'672
	6	2'834	2'854	2'871	2'898	2'912	2'914	2'908	2'906	2'896	2'889	2'876	2'888
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	2'606	2'626	2'611	2'641	2'612	2'603	2'577	2'544	2'516	2'510	2'538	2'533
	9	2'346	2'330	2'360	2'349	2'385	2'402	2'451	2'473	2'486	2'504	2'520	2'532
	10	2'761	2'789	2'797	2'826	2'844	2'846	2'841	2'845	2'845	2'849	2'849	2'841
	11	2'866	2'880	2'896	2'911	2'919	2'915	2'903	2'896	2'892	2'895	2'898	2'900
	12	2'851	2'860	2'870	2'849	2'845	2'821	2'790	2'762	2'750	2'748	2'748	2'748
	13	2'803	2'802	2'844	2'858	2'857	2'850	2'832	2'849	2'829	2'790	2'792	2'748
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	2'357	2'379	2'427	2'471	2'506	2'531	2'562	2'578	2'608	2'632	2'670	2'686
	16	2'839	2'839	2'865	2'860	2'840	2'798	2'737	2'712	2'638	2'629	2'605	2'574
	17	2'619	2'639	2'649	2'659	2'651	2'665	2'661	2'662	2'649	2'652	2'656	2'661
	18	2'562	2'551	2'573	2'555	2'541	2'505	2'474	2'447	2'407	2'367	2'342	2'332
	19	2'541	2'573	2'612	2'687	2'717	2'737	2'749	2'773	2'800	2'838	2'870	2'910
	20	3'104	3'095	3'115	3'114	3'123	3'104	3'068	3'045	3'016	3'003	2'983	2'967
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	2'828	2'841	2'853	2'863	2'878	2'871	2'863	2'858	2'823	2'824	2'830	2'825
	23	2'598	2'582	2'558	2'537	2'531	2'510	2'471	2'461	2'449	2'453	2'444	2'423
	24	2'372	2'380	2'384	2'400	2'414	2'412	2'386	2'376	2'351	2'351	2'351	2'307
	25	2'257	2'265	2'283	2'271	2'276	2'267	2'264	2'263	2'293	2'307	2'321	2'344
	26	2'603	2'632	2'663	2'708	2'753	2'765	2'774	2'778	2'787	2'803	2'817	2'823
	27	2'677	2'660	2'645	2'624	2'622	2'594	2'556	2'544	2'533	2'539	2'552	2'553
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	3'195	3'213	3'221	3'247	3'256	3'249	3'245	3'218	3'216	3'221	3'211	3'206
	30	3'148	3'148	3'152	3'144	3'143	3'117	3'092	3'074	3'052	3'050	3'041	3'019
	Hourly Means	2'6829	2'6909	2'7036	2'7104	2'7163	2'7091	2'6949	2'6872	2'6777	2'6783	2'6795	2'6793
DECEMBER.	1	2'843	2'841	2'851	2'839	2'822	2'806	2'769	2'741	2'703	2'691	2'687	2'699
	2	2'410	2'430	2'455	2'465	2'475	2'488	2'497	2'497	2'491	2'520	2'540	2'556
	3	2'566	2'582	2'586	2'607	2'587	2'583	2'552	2'531	2'540	2'553	2'574	2'586
	4	2'728	2'726	2'735	2'737	2'727	2'721	2'696	2'674	2'642	2'625	2'623	2'624
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	2'697	2'715	2'738	2'750	2'784	2'796	2'796	2'794	2'794	2'806	2'806	2'816
	7	2'878	2'886	2'881	2'897	2'917	2'912	2'898	2'888	2'895	2'906	2'926	2'930
	8	2'821	2'821	2'813	2'801	2'781	2'750	2'700	2'676	2'677	2'685	2'694	2'695
	9	2'827	2'817	2'802	2'784	2'756	2'697	2'641	2'589	2'542	2'491	2'477	2'443
	10	2'345	2'343	2'355	2'369	2'369	2'373	2'386	2'402	2'420	2'448	2'480	2'498
	11	2'595	2'634	2'676	2'719	2'766	2'772	2'792	2'804	2'821	2'855	2'880	2'901
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	2'650	2'662	2'690	2'704	2'724	2'720	2'708	2'698	2'727	2'735	2'735	2'745
	14	2'700	2'702	2'688	2'670	2'654	2'627	2'601	2'583	2'567	2'577	2'589	2'573
	15	2'633	2'653	2'665	2'708	2'736	2'734	2'736	2'736	2'756	2'772	2'801	2'829
	16	3'096	3'092	3'105	3'122	3'125	3'092	3'108	3'079	3'076	3'061	3'076	3'041
	17	2'788	2'787	2'801	2'789	2'788	2'776	2'754	2'726	2'723	2'736	2'764	2'755
	18	2'810	2'808	2'804	2'826	2'810	2'786	2'753	2'706	2'671	2'647	2'617	2'587
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	2'792	2'822	2'842	2'860	2'886	2'877	2'877	2'865	2'868	2'898	2'926	2'961
	21	2'940	2'930	2'912	2'907	2'889	2'853	2'792	2'750	2'719	2'646	2'638	2'586
	22	2'178	2'180	2'172	2'170	2'166	2'161	2'143	2'151	2'162	2'193	2'221	2'255
	23	2'324	2'322	2'272	2'246	2'201	2'153	2'074	2'057	2'025	2'014	2'027	2'007
	24	2'051	2'063	2'125	2'177	2'245	2'254	2'273	2'300	2'314	2'331	2'350	2'337
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	2'981	3'007	3'006	3'023	3'023	3'007	2'974	2'956	2'940	2'918	2'900	2'861
	28	2'658	2'666	2'668	2'671	2'689	2'657	2'644	2'620	2'624	2'637	2'633	2'653
	29	2'627	2'641	2'649	2'650	2'663	2'655	2'625	2'615	2'615	2'624	2'628	2'632
	30	2'597	2'612	2'626	2'646	2'655	2'645	2'633	2'622	2'622	2'644	2'657	2'683
	31	2'750	2'740	2'740	2'745	2'737	2'707	2'689	2'662	2'630	2'625	2'625	2'627
Hourly Means	2'6648	2'6724	2'6787	2'6878	2'6902	2'6770	2'6581	2'6432	2'6371	2'6400	2'6486	2'6508	

<sup>a</sup> Christmas Day.

BAROMETRIC PRESSURE.  
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
2'680	2'680	2'680
2'550	2'544	2'542
2'393	2'401	2'414
2'499	2'495	2'499
2'631	2'650	2'672
2'889	2'876	2'888
—	—	—
2'510	2'538	2'533
2'504	2'520	2'532
2'849	2'849	2'844
2'895	2'898	2'909
2'748	2'746	2'740
2'790	2'792	2'748
—	—	—
2'632	2'670	2'686
2'629	2'605	2'571
2'652	2'655	2'664
2'367	2'342	2'352
2'838	2'870	2'910
3'003	2'983	2'967
—	—	—
2'821	2'830	2'825
2'453	2'444	2'423
2'351	2'335	2'307
2'307	2'321	2'344
2'803	2'817	2'823
2'539	2'552	2'553
—	—	—
3'221	3'211	3'206
3'050	3'041	3'019
—	—	—
2'6783	2'6795	2'6794
—	—	—
2'691	2'687	2'690
2'520	2'530	2'556
2'553	2'574	2'586
2'625	2'623	2'621
—	—	—
2'806	2'806	2'816
2'906	2'926	2'930
2'685	2'691	2'665
2'491	2'477	2'448
2'448	2'480	2'493
2'855	2'880	2'901
—	—	—
2'735	2'735	2'745
2'377	2'359	2'373
2'772	2'801	2'829
3'061	3'076	3'041
2'736	2'764	2'755
2'647	2'617	2'587
—	—	—
2'898	2'926	2'961
2'646	2'638	2'636
2'193	2'221	2'256
2'014	2'027	2'007
2'331	2'350	2'357
—	—	—
2'918	2'900	2'861
2'637	2'633	2'653
2'621	2'628	2'652
2'641	2'657	2'683
2'630	2'625	2'627
—	—	—
2'6400	2'6486	2'6508

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	In.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'696	2'710	2'714	2'722	2'720	2'722	2'711	2'690	2'690	2'690	2'680	2'676	2'6953
2'536	2'511	2'519	2'553	2'545	2'530	2'526	2'521	2'521	2'499	2'487	2'480	2'5704
2'430	2'434	2'442	2'466	2'472	2'480	2'482	2'501	2'521	2'535	2'542	2'546	2'4589
2'493	2'491	2'506	2'504	2'505	2'525	2'538	2'553	2'557	2'561	2'572	2'582	2'5361
2'696	2'720	2'711	2'756	2'756	2'766	2'786	2'795	2'787	2'785	2'803	2'820	2'6925
2'901	2'889	2'876	2'880	2'871	2'866	—	—	—	—	—	—	2'8199
—	—	—	—	—	—	2'618	2'636	2'627	2'613	2'619	2'605	2'5243
2'536	2'539	2'529	2'523	2'510	2'494	2'468	2'443	2'435	2'405	2'393	2'360	2'5298
2'517	2'553	2'573	2'591	2'597	2'603	2'606	2'659	2'677	2'692	2'709	2'745	2'5287
2'810	2'866	2'870	2'876	2'878	2'860	2'858	2'851	2'856	2'851	2'856	2'860	2'8446
2'918	2'920	2'910	2'914	2'916	2'910	2'898	2'881	2'882	2'868	2'869	2'855	2'8968
2'748	2'760	2'760	2'758	2'762	2'762	2'758	2'751	2'769	2'769	2'777	2'783	2'7833
2'721	2'616	2'606	2'571	2'503	2'411	—	—	—	—	—	—	2'6281
—	—	—	—	—	—	2'287	2'281	2'281	2'285	2'287	2'335	2'6066
2'711	2'751	2'772	2'782	2'786	2'791	2'797	2'828	2'838	2'836	2'842	2'858	2'6563
2'561	2'559	2'541	2'542	2'532	2'559	2'565	2'556	2'571	2'578	2'592	2'577	2'6406
2'696	2'666	2'660	2'660	2'630	2'616	2'614	2'631	2'608	2'591	2'591	2'561	2'4187
2'314	2'296	2'290	2'297	2'317	2'355	2'369	2'376	2'397	2'415	2'452	2'496	2'8803
2'938	2'968	2'982	2'999	3'015	3'024	3'031	3'018	3'068	3'069	3'065	3'084	2'9599
2'926	2'919	2'889	2'861	2'858	2'860	—	—	—	—	—	—	2'819
—	—	—	—	—	—	2'832	2'832	2'840	2'836	2'828	2'819	2'7955
2'827	2'827	2'813	2'796	2'809	2'790	2'756	2'730	2'702	2'661	2'615	2'611	2'5316
2'407	2'399	2'393	2'358	2'350	2'340	2'340	2'340	2'342	2'346	2'358	2'352	2'3155
2'307	2'297	2'297	2'271	2'248	2'230	2'246	2'222	2'223	2'246	2'253	2'264	2'3557
2'352	2'357	2'367	2'371	2'394	2'406	2'423	2'415	2'455	2'462	2'533	2'558	2'3557
2'837	2'844	2'845	2'845	2'847	2'835	2'846	2'808	2'788	2'774	2'758	2'721	2'7761
2'554	2'586	2'582	2'569	2'551	2'541	—	—	—	—	—	—	2'7151
—	—	—	—	—	—	3'059	3'079	3'106	3'130	3'138	3'169	3'2045
3'202	3'204	3'195	3'190	3'180	3'180	3'180	3'185	3'187	3'189	3'166	3'156	3'2015
2'926	2'990	2'976	2'962	2'951	2'937	2'929	2'923	2'923	2'901	2'875	2'860	3'0168
—	—	—	—	—	—	—	—	—	—	—	—	—
2'6597	2'6820	2'6795	2'6777	2'6736	2'6702	2'6742	2'6758	2'6800	2'6768	2'6805	2'6822	2'6851
—	—	—	—	—	—	—	—	—	—	—	—	—
2'984	2'690	2'640	2'628	2'588	2'552	2'510	2'486	2'442	2'411	2'401	2'402	2'6543
2'557	2'575	2'565	2'575	2'581	2'577	2'583	2'575	2'565	2'553	2'547	2'538	2'5252
2'601	2'605	2'610	2'618	2'631	2'640	2'649	2'665	2'681	2'691	2'699	2'716	2'6108
2'612	2'595	2'575	2'541	2'518	2'514	—	—	—	—	—	—	2'6401
—	—	—	—	—	—	2'587	2'595	2'622	2'633	2'651	2'669	2'6899
2'828	2'830	2'832	2'844	2'841	2'847	2'836	2'834	2'845	2'840	2'853	2'856	2'8078
2'938	2'935	2'933	2'932	2'918	2'915	2'905	2'903	2'877	2'857	2'851	2'825	2'9001
2'721	2'751	2'761	2'779	2'793	2'798	2'814	2'802	2'828	2'822	2'826	2'833	2'7684
2'451	2'396	2'392	2'371	2'369	2'367	2'360	2'337	2'337	2'351	2'325	2'339	2'5105
2'532	2'549	2'552	2'577	2'577	2'589	2'567	2'541	2'546	2'550	2'568	2'603	2'4808
2'907	2'911	2'920	2'951	2'972	2'968	—	—	—	—	—	—	2'7760
—	—	—	—	—	—	2'629	2'617	2'629	2'625	2'625	2'621	2'6291
2'771	2'791	2'806	2'807	2'788	2'791	2'758	2'763	2'763	2'732	2'724	2'702	2'7374
2'573	2'554	2'569	2'545	2'541	2'571	2'584	2'579	2'595	2'603	2'607	2'613	2'6030
2'847	2'904	2'926	2'942	2'933	2'966	2'974	3'001	3'038	3'039	3'054	3'072	2'8523
3'035	3'018	2'978	2'974	2'930	2'919	2'903	2'893	2'871	2'854	2'808	2'782	3'0016
2'766	2'780	2'792	2'818	2'830	2'829	2'823	2'823	2'821	2'823	2'814	2'806	2'7881
2'579	2'546	2'521	2'496	2'486	2'456	—	—	—	—	—	—	2'6811
—	—	—	—	—	—	2'709	2'719	2'733	2'742	2'758	2'773	2'7733
2'980	2'990	3'008	3'047	3'008	3'018	3'018	2'997	2'994	2'988	2'971	2'953	2'9340
2'550	2'501	3'491	3'447	3'413	3'384	3'341	2'275	2'255	2'230	2'199	2'186	2'5764
2'291	2'317	3'345	3'349	3'356	3'382	3'338	2'358	2'357	2'349	2'336	2'328	2'2616
2'011	2'011	1'997	1'981	1'954	1'956	1'957	1'967	1'977	2'007	2'015	2'019	2'0656
2'387	2'404	2'399	2'393	2'394	2'400	—	—	—	—	—	—	2'4523
—	—	—	—	—	—	2'915	2'933	2'948	2'951	2'954	2'965	2'9653
2'847	2'831	2'795	2'767	2'731	2'729	2'690	2'660	2'688	2'691	2'659	2'654	2'8174
2'675	2'703	2'714	2'697	2'696	2'692	2'677	2'671	2'653	2'636	2'636	2'636	2'6369
2'658	2'668	2'667	2'665	2'656	2'640	2'638	2'626	2'626	2'611	2'601	2'598	2'6377
2'669	2'709	2'717	2'722	2'726	2'720	2'720	2'718	2'718	2'739	2'747	2'728	2'6793
2'625	2'627	2'608	2'588	2'576	2'562	2'558	2'528	2'501	2'487	2'459	2'447	2'6175
—	—	—	—	—	—	—	—	—	—	—	—	—
2'6581	2'6615	2'6583	2'6549	2'6465	2'6456	2'6562	2'6487	2'6510	2'6485	2'6420	2'6398	2'6567

		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hours of Mean Gulbarga Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
JANUARY.													
1	2'385	2'368	2'348	2'334	2'318	2'276	2'251	2'211	2'193	2'185	2'196	2'229	
2	—	—	—	2'610 <sup>a</sup>	—	—	—	—	—	—	2'607 <sup>a</sup>	—	
3	2'714	2'720	2'716	2'716	2'716	2'702	2'660	2'632	2'612	2'602	2'604	2'577	
4	2'693	2'737	2'793	2'818	2'817	2'876	2'890	2'903	2'929	2'956	2'962	2'982	
5	2'752	2'685	2'593	2'509	2'445	2'327	2'185	2'077	2'021	2'022	2'060	2'147	
6	2'707	2'712	2'723	2'680	2'698	2'678	2'660	2'645	2'631	2'635	2'639	2'637	
7	2'615	2'653	2'672	2'674	2'680	2'650	2'624	2'609	2'601	2'594	2'593	2'579	
8	2'329	2'333	2'338	2'341	2'352	2'350	2'334	2'325	2'325	2'354	2'365	2'366	
9	—	—	—	2'421	—	—	—	—	—	—	2'584	—	
10	2'982	3'003	3'038	3'068	3'092	3'109	3'103	3'109	3'120	3'120	3'155	3'172	3'180
11	2'965	2'910	2'895	2'870	2'828	2'785	2'699	2'638	2'636	2'633	2'668	2'703	
12	2'938	2'958	2'980	3'022	3'027	3'016	3'001	2'979	2'980	2'980	2'974	2'972	
13	2'818	2'801	2'802	2'824	2'793	2'780	2'761	2'747	2'739	2'739	2'715	2'708	
14	2'710	2'751	2'768	2'780	2'780	2'766	2'736	2'718	2'708	2'702	2'692	2'680	
15	2'366	2'360	2'368	2'371	2'380	2'380	2'377	2'382	2'402	2'412	2'477	2'511	
16	—	—	—	2'986	—	—	—	—	—	—	2'897	—	
17	2'731	2'815	2'875	2'911	2'978	2'987	2'971	2'961	2'961	2'960	2'942	2'911	
18	2'507	2'587	2'633	2'711	2'767	2'836	2'869	2'911	2'953	2'987	3'022	3'061	
19	3'259	3'267	3'285	3'298	3'284	3'275	3'215	3'207	3'179	3'161	3'141	3'114	
20	2'822	2'811	2'820	2'825	2'829	2'811	2'776	2'758	2'723	2'705	2'665	2'655	
21	2'393	2'392	2'379	2'375	2'344	2'347	2'358	2'361	2'410	2'479	2'537	2'577	
22	2'824	2'796	2'796	2'801	2'787	2'747	2'690	2'651	2'619	2'595	2'593	2'613	
23	—	—	—	2'999	—	—	—	—	—	—	3'019	—	
24	3'070	3'071	3'071	3'095	3'092	3'090	3'051	3'030	3'019	3'012	3'065	2'965	
25	2'920	2'919	2'919	2'929	2'920	2'908	2'889	2'892	2'884	2'889	2'875	2'877	
26	2'699	2'682	2'667	2'649	2'625	2'586	2'542	2'500	2'466	2'454	2'429	2'411	
27	2'361	2'362	2'368	2'380	2'378	2'365	2'329	2'313	2'303	2'291	2'274	2'271	
28	2'276	2'271	2'271	2'261	2'231	2'214	2'167	2'133	2'098	2'080	2'070	2'061	
29	2'356	2'390	2'431	2'474	2'526	2'572	2'606	2'605	2'607	2'630	2'640	2'633	
30	—	—	—	2'574	—	—	—	—	—	—	2'652	—	
31	2'318	2'330	2'312	2'292	2'248	2'221	2'174	2'143	2'129	2'133	2'157	2'151	
Hourly Means.	2'6769	2'6815	2'6878	2'6960	2'6935	2'6840	2'6708	2'6325	2'6259	2'6302	2'6470	2'6417	
FEBRUARY.													
1	2'251	2'258	2'252	2'253	2'257	2'265	2'277	2'286	2'306	2'328	2'341	2'347	
2	2'428	2'428	2'434	2'432	2'459	2'452	2'443	2'422	2'419	2'418	2'415	2'414	
3	2'398	2'406	2'420	2'436	2'446	2'434	2'421	2'403	2'393	2'398	2'396	2'397	
4	2'225	2'198	2'182	2'151	2'121	2'085	2'046	2'012	1'982	1'952	1'962	1'961	
5	1'963	1'957	2'095	2'003	2'009	2'008	1'996	2'001	2'015	2'030	2'046	2'061	
6	—	—	—	2'211 <sup>a</sup>	—	—	—	—	—	—	2'260	—	
7	2'543	2'561	2'581	2'600	2'606	2'612	2'604	2'567	2'594	2'589	2'582	2'581	
8	2'483	2'495	2'515	2'528	2'542	2'565	2'578	2'592	2'601	2'671	2'649	2'641	
9	2'759	2'757	2'748	2'729	2'708	2'650	2'594	2'547	2'441	2'417	2'444	2'441	
10	2'698	2'682	2'711	2'732	2'806	2'817	2'800	2'798	2'791	2'789	2'803	2'817	
11	3'063	3'117	3'141	3'155	3'160	3'143	3'143	3'094	3'071	3'063	3'061	3'061	
12	3'015	3'023	3'037	3'047	3'055	3'058	3'042	3'030	3'017	3'021	3'023	3'023	
13	—	—	—	2'985	—	—	—	—	—	—	2'841	—	
14	2'625	2'625	2'637	2'634	2'600	2'597	2'590	2'579	2'568	2'570	2'574	2'573	
15	2'826	2'842	2'860	2'886	2'894	2'888	2'868	2'854	2'828	2'821	2'806	2'791	
16	2'744	2'747	2'772	2'781	2'778	2'768	2'745	2'723	2'718	2'710	2'710	2'711	
17	2'679	2'698	2'714	2'727	2'726	2'736	2'735	2'733	2'728	2'736	2'744	2'741	
18	2'824	2'846	2'854	2'859	2'850	2'844	2'831	2'812	2'789	2'783	2'779	2'775	
19	2'596	2'600	2'597	2'589	2'566	2'534	2'509	2'487	2'439	2'431	2'428	2'427	
20	—	—	—	1'957	—	—	—	—	—	—	1'897	—	
21	2'298	2'356	2'394	2'445	2'468	2'491	2'509	2'540	2'547	2'558	2'561	2'571	
22	2'587	2'601	2'586	2'582	2'582	2'583	2'546	2'528	2'500	2'486	2'486	2'487	
23	2'552	2'588	2'608	2'627	2'631	2'635	2'625	2'630	2'648	2'677	2'682	2'687	
24	2'890	2'890	2'910	2'921	2'923	2'923	2'909	2'889	2'875	2'874	2'876	2'876	
25	3'091	3'109	3'118	3'120	3'119	3'120	3'106	3'086	3'066	3'053	3'051	3'049	
26	2'918	2'920	2'902	2'883	2'852	2'827	2'789	2'744	2'694	2'656	2'636	2'635	
27	—	—	—	2'645	—	—	—	—	—	—	2'536	—	
28	2'487	2'467	2'399	2'359	2'339	2'299	2'267	2'244	2'184	2'170	2'175	2'196	
29	2'280	2'304	2'328	2'340	2'360	2'367	2'379	2'385	2'399	2'423	2'445	2'450	
Hourly Means.	2'6078	2'6198	2'6286	2'6337	2'6330	2'6267	2'6120	2'5970	2'5838	2'5849	2'5860	2'5860	

\* The Observations made at 9 a.m. and 3 p.m. on Sunday are for the first time given in this Abstract: they are not included in the Means.

BAROMETRIC PRESSURE.  
Baromet at 32° = 27 English Inches + the numbers in the Table.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2'185	2'196	2'220	2'241	2'300	2'301	2'370	2'368	2'388	—	—	—	—	—	—	2'3975
2'602	2'604	2'687	2'581	2'573	2'573	2'559	2'575	2'575	2'581	2'591	2'617	2'619	2'612	2'724	2'6303
2'956	2'962	2'982	2'960	3'000	3'002	2'979	2'981	2'956	2'951	2'920	2'901	2'868	2'816	2'801	2'8983
2'022	2'060	2'147	2'236	2'237	2'323	2'397	2'471	2'507	2'524	2'550	2'576	2'614	2'610	2'701	2'3987
2'635	2'639	2'687	2'616	2'650	2'652	2'652	2'650	2'641	2'622	2'614	2'653	2'653	2'651	2'645	2'6586
2'591	2'593	2'570	2'579	2'554	2'549	2'518	2'510	2'490	2'480	2'430	2'411	2'384	2'365	2'345	2'5498
2'351	2'365	2'366	2'581	—	—	—	—	—	—	—	—	—	—	—	2'4777
3'155	3'172	3'180	3'186	3'186	3'180	3'172	3'141	3'144	3'148	3'100	3'072	3'011	3'021	3'011	3'1017
2'633	2'668	2'700	2'743	2'776	2'790	2'788	2'791	2'817	2'830	2'848	2'880	2'908	2'893	2'908	2'8015
2'980	2'971	2'972	2'936	2'957	2'952	2'934	2'918	2'906	2'896	2'876	2'866	2'853	2'840	2'823	2'9418
2'739	2'745	2'778	2'748	2'747	2'747	2'744	2'742	2'740	2'740	2'740	2'742	2'741	2'729	2'731	2'7585
2'702	2'692	2'680	2'672	2'659	2'647	2'643	2'645	2'646	2'496	2'486	2'456	2'448	2'406	2'368	2'6332
2'442	2'477	2'511	2'601	2'659	2'703	2'746	2'761	2'800	—	—	—	—	—	—	2'5393
2'897	—	—	2'910	—	—	—	—	—	2'639	2'632	2'632	2'622	2'634	2'612	2'8053
2'900	2'942	2'911	2'991	2'874	2'841	2'805	2'775	2'721	2'649	2'638	2'567	2'517	2'501	2'495	2'8949
2'987	3'022	3'061	3'030	3'122	3'133	3'143	3'148	3'156	3'159	3'173	3'201	3'212	3'226	3'251	2'9949
3'161	3'141	3'143	3'076	3'050	3'026	2'996	2'952	2'896	2'862	2'858	2'868	2'853	2'825	2'814	3'0732
2'705	2'695	2'655	2'671	2'653	2'661	2'643	2'587	2'565	2'544	2'531	2'515	2'481	2'457	2'426	2'6647
2'479	2'537	2'573	2'635	2'622	2'670	2'712	2'724	2'751	2'778	2'785	2'811	2'824	2'823	2'825	2'5786
2'595	2'593	2'621	2'631	2'619	2'668	2'688	2'691	2'697	—	—	—	—	—	—	2'7901
3'049	—	—	2'669	2'685	2'672	2'668	2'661	2'664	2'643	2'643	2'643	2'643	2'643	2'643	3'0022
3'042	3'065	2'965	2'872	2'887	2'889	2'878	2'860	2'840	2'820	2'802	2'800	2'776	2'750	2'721	2'8636
2'889	2'875	2'875	2'841	2'807	2'806	2'806	2'806	2'806	2'806	2'806	2'806	2'806	2'806	2'806	2'4701
2'451	2'429	2'414	2'401	2'397	2'390	2'380	2'383	2'373	2'373	2'385	2'383	2'383	2'365	2'355	2'2818
2'291	2'273	2'271	2'263	2'259	2'241	2'240	2'231	2'217	2'212	2'206	2'220	2'231	2'250	2'272	2'1597
2'080	2'070	2'060	2'057	2'057	2'059	2'071	2'091	2'132	2'148	2'167	2'193	2'211	2'216	2'296	2'5840
2'652	2'710	2'660	2'723	2'747	2'766	2'776	2'790	2'800	—	—	—	—	—	—	2'2474
2'163	2'157	2'141	2'202	2'241	2'265	2'274	2'298	2'301	2'290	2'288	2'296	2'291	2'271	2'251	2'6574
2'6362	2'6370	2'6417	2'6337	2'6910	2'6975	2'6673	2'6618	2'6606	2'6830	2'6816	2'6839	2'6774	2'6675	2'6704	2'6657
2'328	2'341	2'342	2'329	2'396	2'403	2'397	2'427	2'428	2'432	2'440	2'442	2'430	2'429	2'425	2'3541
2'418	2'425	2'427	2'429	2'420	2'420	2'420	2'408	2'397	2'388	2'376	2'376	2'384	2'376	2'371	2'4163
2'398	2'396	2'397	2'400	2'398	2'393	2'376	2'365	2'361	2'346	2'336	2'348	2'293	2'275	2'245	2'3771
1'952	1'932	1'921	1'926	1'925	1'944	1'950	1'964	1'978	1'991	1'986	1'976	1'973	1'937	1'967	2'0138
2'030	2'046	2'061	2'050	2'084	2'088	2'076	2'079	2'067	—	—	—	—	—	—	2'1433
2'260	—	—	2'259	2'257	2'271	2'251	2'233	2'236	2'228	2'210	2'212	2'194	2'198	2'122	2'5598
2'589	2'582	2'578	2'579	2'578	2'574	2'551	2'533	2'536	2'531	2'523	2'500	2'481	2'476	2'476	2'6671
2'674	2'649	2'646	2'647	2'628	2'642	2'634	2'666	2'662	2'672	2'675	2'678	2'671	2'676	2'679	2'5533
2'417	2'434	2'441	2'428	2'446	2'472	2'475	2'486	2'500	2'514	2'522	2'537	2'547	2'570	2'539	2'8747
2'789	2'803	2'817	2'856	2'887	2'909	2'940	2'952	2'986	3'000	3'025	3'046	3'047	3'051	3'089	3'0538
3'063	3'064	3'071	3'021	3'045	3'020	3'041	3'010	3'006	2'992	2'982	2'988	2'984	2'985	3'005	2'9385
2'841	—	—	2'841	—	—	—	—	—	2'692	2'662	2'654	2'642	2'630	2'613	2'9385
2'570	2'574	2'573	2'622	2'614	2'606	2'686	2'691	2'706	2'725	2'731	2'746	2'767	2'785	2'793	2'6567
2'821	2'806	2'799	2'781	2'773	2'768	2'766	2'767	2'770	2'763	2'751	2'737	2'740	2'752	2'752	2'8041
2'710	2'740	2'741	2'699	2'702	2'700	2'702	2'700	2'678	2'662	2'662	2'658	2'658	2'666	2'662	2'7142
2'736	2'744	2'743	2'737	2'758	2'772	2'780	2'800	2'840	2'846	2'805	2'806	2'806	2'810	2'823	2'7606
2'783	2'779	2'773	2'777	2'755	2'753	2'741	2'724	2'706	2'683	2'673	2'652	2'638	2'637	2'616	2'7568
2'411	2'428	2'430	1'897	2'406	2'386	2'362	2'361	2'390	—	—	—	—	—	—	2'3852
2'558	—	—	2'558	—	—	—	—	—	2'076	2'113	2'136	2'171	2'220	2'259	2'5475
2'486	2'486	2'497	2'63	2'611	2'617	2'613	2'619	2'627	2'628	2'630	2'627	2'623	2'605	2'596	2'5475
2'677	2'682	2'697	2'670	2'678	2'671	2'652	2'646	2'641	2'601	2'519	2'518	2'527	2'550	2'5180	
2'874	2'876	2'882	2'861	2'877	2'866	2'852	2'841	2'847	2'807	2'860	2'868	2'876	2'895	2'7450	
3'053	3'051	3'049	3'029	3'030	3'028	3'017	3'015	3'002	2'991	2'985	2'977	2'962	2'949	2'926	3'0512
2'656	2'636	2'635	2'621	2'629	2'617	2'612	2'614	2'607	—	—	—	—	—	—	2'6985
2'633	—	—	2'633	—	—	—	—	—	2'611	2'612	2'622	2'606	2'566	2'527	2'6985
2'435	2'445	2'445	2'495	2'499	2'499	2'499	2'473	2'473	2'471	2'481	2'498	2'447	2'430	2'432	2'2420
2'423	2'415	2'415	2'479	2'504	2'528	2'555	2'561	2'567	2'565	2'575	2'581	2'591	2'600	2'635	2'4655
2'5849	2'5860	2'5890	2'5946	2'6032	2'6083	2'6098	2'6087	2'6092	2'6011	2'6076	2'6115	2'6114	2'6122	2'6188	2'6084

included in the Means.



BAROMETRIC PRESSURE.													
Barometer at 32° = 27 English inches + the numbers in the Table.													
Hours of Mean Gatting's Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
MARCH	1	27.663	27.700	27.723	27.742	27.762	27.765	27.766	27.749	27.747	27.755	27.761	27.811
	2	27.622	27.620	27.626	27.617	27.615	27.602	27.582	27.916	27.921	27.894	27.886	27.856
	3	27.445	27.445	27.415	27.423	27.412	27.407	27.395	27.379	27.376	27.396	27.438	27.486
	4	27.848	27.846	27.839	27.833	27.840	27.848	27.855	27.737	27.689	27.676	27.646	27.623
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	27.597	27.611	27.612	27.615	27.614	27.608	27.600	27.600	27.595	27.603	27.619	27.626
	7	27.704	27.712	27.696	27.683	27.650	27.642	27.579	27.534	27.482	27.450	27.421	27.390
	8	27.245	27.227	27.225	27.203	27.173	27.161	27.139	27.111	27.127	27.125	27.207	27.216
	9	27.642	27.684	27.692	27.708	27.712	27.723	27.720	27.688	27.696	27.665	27.666	27.666
	10	27.517	27.508	27.526	27.517	27.495	27.492	27.488	27.459	27.453	27.458	27.482	27.507
	11	27.700	27.714	27.731	27.741	27.746	27.749	27.747	27.741	27.722	27.711	27.713	27.716
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	27.570	27.591	27.608	27.622	27.634	27.640	27.656	27.653	27.668	27.692	27.713	27.731
	14	27.768	27.782	27.784	27.775	27.768	27.752	27.736	27.731	27.732	27.740	27.739	27.783
	15	27.922	27.938	27.970	27.976	27.970	27.960	27.947	27.927	27.906	27.905	27.912	27.929
	16	27.954	27.960	27.956	27.949	27.946	27.934	27.905	27.857	27.817	27.792	27.774	27.766
	17	27.660	27.659	27.670	27.689	27.671	27.652	27.635	27.631	27.614	27.591	27.576	27.551
	18	27.429	27.431	27.417	27.429	27.426	27.423	27.418	27.400	27.405	27.414	27.394	27.415
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	27.692	27.686	27.700	27.629	27.604	27.615	27.570	27.486	27.442	27.356	27.335	27.272
	21	27.348	27.416	27.436	27.458	27.473	27.591	27.504	27.520	27.517	27.533	27.544	27.566
	22	27.742	27.746	27.723	27.734	27.725	27.723	27.708	27.700	27.685	27.661	27.653	27.641
	23	27.734	27.756	27.778	27.782	27.802	27.792	27.827	27.828	27.806	27.808	27.810	27.845
	24	27.928	27.942	27.952	27.962	27.954	27.935	27.918	27.920	27.936	27.896	27.906	27.894
	25	27.734	27.728	27.716	27.691	27.669	27.645	27.611	27.607	27.586	27.551	27.541	27.503
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	27.565	27.575	27.599	27.584	27.589	27.577	27.572	27.596	27.563	27.542	27.553	27.599
	28	27.724	27.739	27.752	27.778	27.764	27.761	27.760	27.750	27.726	27.697	27.707	27.698
	29	27.790	27.804	27.805	27.804	27.799	27.800	27.802	27.802	27.795	27.792	27.790	27.807
	30	27.928	27.940	27.944	27.949	27.894	27.874	27.840	27.806	27.763	27.726	27.698	27.653
	31	27.442	27.463	27.377	27.341	27.298	27.238	27.195	27.183	27.163	27.161	27.156	27.158
Hourly Means		27.6760	27.6864	27.6903	27.6890	27.6847	27.6726	27.6620	27.6443	27.6259	27.6146	27.6171	27.6174
APRIL	1	27.574	27.629	27.659	27.704	27.725	27.733	27.752	27.761	27.812	27.831	27.860	27.876
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	27.048	27.056	27.059	27.074	27.092	27.045	27.024	27.004	27.956	27.938	27.920	27.886
	4	27.745	27.750	27.750	27.758	27.760	27.748	27.736	27.734	27.730	27.740	27.741	27.754
	5	27.954	27.967	27.984	27.992	27.984	27.970	27.955	27.944	27.944	27.942	27.904	27.882
	6	27.870	27.873	27.872	27.862	27.861	27.855	27.838	27.849	27.796	27.774	27.765	27.765
	7	27.843	27.849	27.868	27.886	27.889	27.898	27.885	27.867	27.855	27.833	27.826	27.799
	8	27.774	27.792	27.780	27.774	27.754	27.733	27.706	27.685	27.660	27.649	27.638	27.631
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	27.633	27.658	27.640	27.626	27.621	27.600	27.582	27.566	27.547	27.524	27.508	27.500
	11	27.590	27.618	27.672	27.638	27.636	27.644	27.632	27.656	27.661	27.628	27.640	27.638
	12	27.801	27.792	27.777	27.751	27.740	27.709	27.692	27.625	27.595	27.563	27.520	27.504
	13	27.337	27.354	27.330	27.325	27.307	27.307	27.307	27.311	27.344	27.354	27.363	27.377
	14	27.446	27.458	27.487	27.503	27.514	27.531	27.544	27.552	27.556	27.556	27.565	27.584
	15	27.648	27.667	27.676	27.688	27.673	27.665	27.650	27.656	27.647	27.642	27.635	27.636
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	27.652	27.660	27.662	27.662	27.662	27.650	27.634	27.605	27.587	27.583	27.577	27.561
	18	27.784	27.774	27.764	27.754	27.759	27.770	27.788	27.804	27.802	27.804	27.849	27.845
	19	27.039	27.038	27.039	27.039	27.088	27.082	27.064	27.069	27.060	27.044	27.028	27.022
	20	27.976	27.974	27.973	27.955	27.935	27.904	27.848	27.812	27.776	27.730	27.690	27.694
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	27.599	27.619	27.635	27.643	27.659	27.651	27.652	27.645	27.633	27.620	27.614	27.621
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	27.429	27.439	27.459	27.459	27.451	27.494	27.488	27.498	27.515	27.529	27.535	27.531
	25	27.684	27.686	27.689	27.701	27.697	27.682	27.633	27.617	27.580	27.561	27.540	27.536
	26	27.725	27.748	27.756	27.768	27.779	27.777	27.775	27.784	27.777	27.777	27.787	27.798
	27	27.949	27.963	27.978	27.989	27.994	27.979	27.963	27.946	27.934	27.916	27.923	27.909
	28	27.911	27.916	27.916	27.902	27.892	27.850	27.830	27.799	27.740	27.715	27.674	27.659
	29	27.471	27.523	27.582	27.638	27.670	27.704	27.726	27.752	27.769	27.779	27.788	27.806
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means		27.7104	27.7540	27.7639	27.7681	27.7658	27.7618	27.7487	27.7415	27.7318	27.7205	27.7155	27.7140

\* Good Friday.

BAROMETRIC PRESSURE.  
Barometer at 32° = 27 English inches + the numbers in the Table.

9	10	11
3	4	5
In.	In.	In.
2755	2761	2781
27891	27886	27856
27396	27438	27486
27676	27646	27623
—	—	—
27603	27649	27626
27450	27421	27390
27425	27407	27386
27665	27666	27666
27458	27482	27507
27714	27713	27716
—	—	—
27692	27713	27731
27740	27759	27783
27905	27912	27929
27792	27771	27766
27591	27576	27571
27414	27391	27375
—	—	—
27356	27335	27322
27533	27514	27503
27691	27653	27641
27808	27810	27815
27896	27906	27903
27551	27541	27533
—	—	—
27512	27533	27560
27697	27707	27698
27792	27790	27807
27726	27698	27673
27161	27156	27158
—	—	—
27616	27617	27617
—	—	—
27831	27860	27876
—	—	—
27938	27920	27889
27740	27744	27734
27912	27901	27882
27774	27765	27765
27833	27826	27796
27649	27638	27631
—	—	—
27524	27508	27500
27628	27610	27638
27563	27520	27501
27851	27861	27877
27556	27565	27581
27642	27635	27636
—	—	—
27883	27877	27861
27801	27819	27845
27941	27928	27922
27730	27699	27694
—	—	—
27620	27614	27621
—	—	—
27529	27535	27551
27561	27540	27536
27777	27787	27798
27916	27923	27909
27715	27671	27650
2779	27788	27806
—	—	—
27205	27155	27110

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	In.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
27837	27873	27873	27918	27935	27936	27940	27960	27966	27998	—	37003	278342
27833	27797	27769	27749	27706	27669	27629	27583	27537	27503	27479	27475	278045
27534	27399	27638	27669	27703	27735	27757	27770	27782	27796	321	27811	275894
27612	27602	27575	27565	27557	27538	—	—	—	—	—	—	276952
—	—	—	—	—	—	27696	27670	27638	27621	27610	27580	27580
27631	27669	27682	27701	27710	27714	27718	27731	27723	27695	27691	27704	276534
27384	27375	27379	27370	27366	27378	27368	27366	27346	27340	27320	27271	274657
27211	27313	27349	27385	27403	27418	27433	27487	27514	27535	27579	27596	273088
27661	27673	27665	27662	27622	27608	27581	27561	27561	27561	27528	27530	276148
27321	27538	27574	27595	27597	27598	27597	27624	27636	27655	27663	27680	275492
27709	27712	27712	27718	27715	27711	—	—	—	—	—	—	276613
—	—	—	—	—	—	27394	27466	27498	27508	27518	27544	277075
27751	27770	27774	27776	27776	27768	27769	27771	27773	27755	27759	27760	278056
27798	27824	27827	27849	27850	27852	27860	27862	27862	27867	27880	27893	279430
27945	27949	27957	27953	27945	27950	27946	27940	27946	27946	27942	27951	277987
27742	27745	27738	27728	27726	27738	27742	27726	27695	27674	27652	27656	275987
27551	27546	27566	27591	27486	27472	27466	27467	27441	27426	27412	27429	275528
27331	27454	27490	27504	27532	27530	—	—	—	—	—	—	275076
—	—	—	—	—	—	27708	27699	27722	27709	27699	27703	275737
27242	27249	27247	27170	27188	27200	27204	27210	27219	27216	27248	27258	275766
27630	27635	27652	27675	27674	27692	27699	27692	27678	27671	27675	27688	276800
27649	27647	27646	27654	27664	27666	27666	27670	27689	27678	27691	27708	276261
27821	27830	27849	27846	27845	27856	27854	27857	27859	27876	27890	27913	278261
27889	27887	27859	27840	27824	27818	27790	27796	27773	27754	27714	27754	278694
27488	27464	27456	27452	27425	27425	—	—	—	—	—	—	275618
—	—	—	—	—	—	27549	27528	27520	27521	27521	27524	276047
27574	27594	27623	27635	27628	27632	27610	27618	27654	27673	27684	27702	277122
27698	27683	27675	27668	27650	27668	27667	27681	27705	27701	27709	27741	278455
27845	27847	27857	27866	27904	27914	27912	27899	27900	27926	27929	27917	276753
27653	27663	27584	27545	27543	27499	27499	27493	27470	27458	27438	27420	276720
27167	27114	27408	27430	27496	27251	27339	27380	27415	27417	27463	27495	276176
—	—	—	—	—	—	—	—	—	—	—	—	—
276493	276270	276298	276342	276348	276379	276450	276495	276487	276474	276362	276570	276176
—	—	—	—	—	—	—	—	—	—	—	—	—
27895	27907	27927	27929	27951	27972	—	—	—	—	—	—	278624
—	—	—	—	—	—	37040	37035	37031	37026	37036	37035	279152
27865	27861	27867	27850	27859	27848	27838	27822	27804	27775	27759	27743	279336
27758	27788	27797	27807	27829	27834	27856	27856	27856	27870	27892	27925	279036
27882	27900	27903	27896	27895	27888	27874	27859	27869	27863	27866	27866	279143
27768	27778	27801	27807	27809	27802	27814	27804	27814	27813	27813	27826	278163
27793	27796	27806	27793	27783	27777	27784	27788	27807	27790	27777	27770	278234
27628	27624	27625	27627	27626	27626	—	—	—	—	—	—	276654
—	—	—	—	—	—	27611	27609	27600	27604	27608	27609	27609
27492	27527	27544	27551	27544	27548	27577	27554	27547	27543	27550	27578	275644
27652	27658	27658	27638	27634	27714	27730	27746	27757	27761	27770	27767	276790
27470	27457	27442	27439	27402	27370	27347	27343	27294	27297	27306	27322	275202
27393	27401	27449	27448	27449	27446	27447	27445	27445	27424	27425	27426	273748
27592	27604	27613	27607	27610	27612	27610	27592	27585	27602	27608	27628	275646
27642	27648	27657	27666	27677	27693	—	—	—	—	—	—	277125
—	—	—	—	—	—	27829	27841	27852	27884	27900	27926	27776
—	27845	27853	27829	27816	27806	27792	27791	27776	27789	27775	27776	278666
27871	27889	27924	27929	27936	27940	27950	27940	27955	27972	27978	27981	278637
27943	27944	27944	27942	27944	27945	27940	27940	27960	27966	27980	27966	370273
27694	27677	27692	27694	27693	27691	—	—	—	—	—	—	277282
—	—	—	—	—	—	27461	27492	27506	27517	27529	27555	275661
27620	27626	27617	27641	27638	27646	—	—	—	—	—	—	275478
—	—	—	—	—	—	27327	27330	27361	27376	27388	27395	275943
27561	27563	27575	27588	27610	27619	27620	27628	27623	27623	27637	27654	278130
27522	27494	27481	27479	27475	27503	27533	27577	27605	27636	27654	27701	279319
27802	27811	27826	27840	27842	27852	27853	27864	27874	27895	27905	27925	276553
27900	27913	27914	27918	27932	27934	27918	27918	27914	27916	27915	27919	279358
27639	27588	27534	27549	27536	27482	27462	27444	27425	27433	27433	27437	276553
27836	27892	27857	27861	27863	27876	—	—	—	—	—	—	277373
—	—	—	—	—	—	27763	27757	27739	27732	27700	27701	—
—	—	—	—	—	—	—	—	—	—	—	—	—
277133	277168	277248	277274	277276	277273	277079	277069	277082	277137	277168	277263	277310

		BAROMETRIC PRESSURE.											
		Barometer at 32° = 27 English inches + the numbers in the Table.											
Hour of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	27.681	27.683	27.683	27.659	27.643	27.630	27.613	27.605	27.591	27.567	27.557	27.557	27.546
2	27.499	27.512	27.496	27.481	27.467	27.483	27.468	27.463	27.454	27.451	27.444	27.444	27.441
3	27.452	27.443	27.441	27.453	27.446	27.438	27.428	27.416	27.393	27.374	27.370	27.361	27.361
4	27.455	27.461	27.481	27.453	27.462	27.451	27.437	27.409	27.399	27.380	27.380	27.344	27.344
5	27.310	27.306	27.309	27.306	27.312	27.309	27.300	27.282	27.235	27.245	27.254	27.250	27.250
6	27.429	27.429	27.437	27.430	27.431	27.421	27.410	27.406	27.409	27.382	27.369	27.389	27.389
7	—	—	—	27.363	—	—	—	—	—	27.359	—	—	—
8	27.620	27.620	27.620	27.621	27.610	27.597	27.587	27.555	27.552	27.530	27.521	27.503	27.503
9	27.532	27.536	27.545	27.546	27.540	27.531	27.519	27.502	27.484	27.481	27.468	27.461	27.461
10	27.481	27.487	27.494	27.485	27.476	27.480	27.458	27.452	27.436	27.420	27.410	27.396	27.396
11	27.265	27.263	27.254	27.236	27.258	27.261	27.263	27.275	27.285	27.295	27.315	27.322	27.322
12	27.429	27.441	27.463	27.480	27.479	27.468	27.457	27.451	27.432	27.440	27.430	27.415	27.415
13	27.395	27.385	27.349	27.277	27.229	27.170	27.140	27.146	27.172	27.200	27.230	27.262	27.262
14	—	—	—	27.701	—	—	—	—	—	27.762	—	—	—
15	27.861	27.856	27.844	27.843	27.849	27.795	27.754	27.724	27.688	27.632	27.592	27.601	27.601
16	27.578	27.592	27.596	27.601	27.605	27.620	27.623	27.617	27.616	27.616	27.616	27.596	27.596
17	27.684	27.688	27.694	27.689	27.689	27.676	27.662	27.649	27.628	27.614	27.598	27.585	27.585
18	27.671	27.686	27.693	27.701	27.701	27.686	27.670	27.654	27.636	27.617	27.605	27.607	27.607
19	27.612	27.616	27.606	27.599	27.587	27.577	27.532	27.530	27.507	27.546	27.502	27.469	27.469
20	27.452	27.469	27.469	27.470	27.469	27.476	27.462	27.437	27.427	27.431	27.426	27.443	27.443
21	—	—	—	27.418	—	—	—	—	—	27.334	—	—	—
22	27.448	27.438	27.452	27.466	27.452	27.462	27.483	27.478	27.476	27.464	27.464	27.464	27.464
23	27.504	27.517	27.528	27.512	27.513	27.508	27.492	27.494	27.462	27.440	27.429	27.401	27.401
24	27.252	27.258	27.272	27.274	27.284	27.291	27.322	27.340	27.361	27.366	27.367	27.381	27.381
25	27.495	27.509	27.525	27.514	27.519	27.514	27.499	27.490	27.476	27.465	27.469	27.468	27.468
26	27.638	27.640	27.639	27.638	27.650	27.647	27.645	27.627	27.632	27.642	27.660	27.674	27.674
27	27.829	27.850	27.850	27.857	27.831	27.822	27.822	27.795	27.773	27.757	27.752	27.741	27.741
28	—	—	—	27.810	—	—	—	—	—	27.741	—	—	—
29	27.566	27.572	27.538	27.525	27.491	27.516	27.468	27.449	27.407	27.375	27.394	27.345	27.345
30	27.356	27.360	27.363	27.358	27.374	27.372	27.364	27.363	27.398	27.422	27.440	27.454	27.454
31	27.628	27.612	27.658	27.659	27.663	27.657	27.639	27.633	27.633	27.624	27.612	27.558	27.558
Hourly Means	27.5249	27.5282	27.5289	27.5242	27.5185	27.5134	27.5007	27.4903	27.4801	27.4733	27.4668	27.4654	27.4654
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
1	27.691	27.705	27.728	27.726	27.718	27.705	27.691	27.662	27.650	27.645	27.644	27.632	27.632
2	27.627	27.628	27.605	27.588	27.563	27.531	27.509	27.481	27.478	27.424	27.401	27.384	27.384
3	27.377	27.404	27.414	27.415	27.421	27.426	27.428	27.445	27.441	27.388	27.388	27.386	27.386
4	—	—	—	27.358	—	—	—	—	—	27.219	—	—	—
5	27.454	27.464	27.467	27.486	27.486	27.468	27.443	27.431	27.407	27.413	27.388	27.400	27.400
6	27.576	27.580	27.592	27.591	27.630	27.644	27.650	27.659	27.662	27.659	27.673	27.664	27.664
7	27.778	27.788	27.796	27.791	27.777	27.761	27.750	27.743	27.736	27.736	27.733	27.743	27.743
8	27.830	27.806	27.807	27.793	27.784	27.773	27.761	27.739	27.736	27.710	27.710	27.699	27.699
9	27.661	27.663	27.653	27.641	27.626	27.608	27.583	27.550	27.532	27.521	27.508	27.464	27.464
10	27.503	27.511	27.509	27.506	27.486	27.481	27.469	27.461	27.458	27.435	27.428	27.436	27.436
11	—	—	—	27.663	—	—	—	—	—	27.667	—	—	—
12	27.913	27.917	27.915	27.907	27.900	27.892	27.880	27.863	27.840	27.820	27.813	27.807	27.807
13	27.784	27.804	27.792	27.789	27.773	27.757	27.741	27.722	27.704	27.697	27.684	27.678	27.678
14	27.640	27.640	27.670	27.661	27.665	27.649	27.641	27.592	27.548	27.535	27.504	27.474	27.474
15	27.529	27.530	27.531	27.534	27.523	27.507	27.502	27.495	27.478	27.462	27.455	27.447	27.447
16	27.558	27.557	27.555	27.544	27.545	27.525	27.508	27.497	27.479	27.464	27.449	27.437	27.437
17	27.498	27.494	27.494	27.492	27.484	27.470	27.451	27.445	27.427	27.423	27.406	27.402	27.402
18	—	—	—	27.371	—	—	—	—	—	27.326	—	—	—
19	27.509	27.513	27.513	27.514	27.518	27.520	27.500	27.481	27.451	27.448	27.439	27.437	27.437
20	27.409	27.403	27.404	27.395	27.376	27.349	27.322	27.322	27.292	27.253	27.238	27.238	27.238
21	27.296	27.313	27.322	27.315	27.319	27.343	27.355	27.369	27.378	27.396	27.400	27.401	27.401
22	27.498	27.498	27.510	27.496	27.505	27.495	27.492	27.493	27.486	27.474	27.474	27.467	27.467
23	27.298	27.257	27.222	27.213	27.202	27.189	27.180	27.168	27.197	27.236	27.258	27.317	27.317
24	27.568	27.576	27.595	27.601	27.615	27.623	27.617	27.616	27.617	27.614	27.626	27.635	27.635
25	—	—	—	27.669	—	—	—	—	—	27.608	—	—	—
26	27.673	27.672	27.684	27.702	27.693	27.689	27.687	27.665	27.651	27.634	27.610	27.595	27.595
27	27.571	27.563	27.552	27.543	27.535	27.525	27.498	27.488	27.469	27.444	27.422	27.421	27.421
28	27.535	27.533	27.553	27.580	27.594	27.602	27.582	27.586	27.590	27.584	27.587	27.589	27.589
29	27.648	27.650	27.656	27.654	27.651	27.641	27.637	27.620	27.609	27.598	27.580	27.580	27.580
30	27.567	27.572	27.566	27.551	27.549	27.528	27.509	27.484	27.467	27.455	27.430	27.404	27.404
Hourly Means	27.5753	27.5793	27.5812	27.5785	27.5745	27.5654	27.5530	27.5403	27.5282	27.5179	27.5100	27.5060	27.5060



		STANDARD THERMOMETER.											
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	1	28.5	29.2	29.6	30.8	31.6	32.9	32.4	32.7	32.2	32.1	31.2	31.2
	2	36.3	36.5	37.2	37.6	39.0	37.9	36.7	36.7	36.3	35.9	35.5	35.4
	3	29.9	30.3	30.3	31.1	31.8	33.9	35.0	35.5	35.9	35.9	35.6	35.3
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	28.1	28.3	27.6	29.9	32.7	32.7	31.3	35.7	35.7	35.1	31.8	33.1
	6	26.5	30.1	30.6	32.0	32.9	33.6	31.4	31.1	31.4	31.5	32.8	32.7
	7	31.7	31.7	35.0	35.9	36.0	36.5	36.7	36.6	36.2	36.5	35.6	35.0
	8	33.5	33.9	34.1	34.1	33.9	34.1	33.9	33.8	34.1	33.9	33.5	33.1
	9	28.4	28.0	27.4	27.5	27.9	27.5	27.2	28.6	29.1	29.1	30.2	30.7
	10	29.2	30.1	30.3	30.6	30.6	30.7	30.8	32.0	31.8	31.2	29.9	29.5
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	25.0	25.0	24.9	24.6	24.6	26.1	26.7	27.1	26.7	25.3	24.1	23.7
	13	9.5	9.7	12.0	13.0	17.8	20.6	23.5	24.1	24.3	24.0	23.4	24.3
	14	28.4	28.1	27.8	28.7	29.9	32.0	33.3	33.9	34.8	35.0	34.6	32.5
	15	18.4	21.5	28.5	32.0	34.1	35.1	37.3	29.0	40.1	40.5	38.4	38.8
	16	30.6	31.0	31.1	31.1	31.8	31.8	29.9	28.4	28.0	26.7	29.1	27.4
	17	11.6	10.7	9.7	8.8	10.1	10.5	10.5	10.0	10.9	12.5	10.3	9.2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	7.1	6.9	6.9	8.1	11.6	13.4	14.8	14.8	15.2	15.8	16.2	14.3
	20	9.5	9.5	9.7	10.9	14.5	15.2	17.3	20.0	21.6	22.0	22.0	22.1
	21	21.9	22.1	22.3	22.0	21.7	22.7	22.7	23.2	24.6	25.1	25.6	25.5
	22	0.7	0.2	0.8	2.7	6.1	9.5	12.4	16.6	18.8	18.9	18.8	17.1
	23	6.6	6.0	4.9	9.5	13.9	17.4	19.2	20.2	20.8	21.9	22.3	20.8
	24	20.2	19.2	20.8	22.9	26.3	29.0	31.0	31.4	32.9	34.9	34.7	33.5
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	33.9	34.3	34.7	35.1	38.8	38.6	37.0	37.5	37.5	37.5	36.6	35.4
	27	18.2	15.8	15.0	17.0	18.5	20.1	21.9	22.7	23.2	23.7	22.7	22.3
	28	31.2	31.9	32.3	32.7	33.7	35.8	36.8	36.8	37.9	37.3	35.9	35.2
	29	33.5	34.0	34.1	34.4	35.4	36.2	37.3	36.8	35.8	35.2	35.6	35.6
	30	37.2	37.4	36.3	37.8	39.4	38.8	39.5	41.0	41.2	40.8	40.6	40.1
	31	18.1	15.8	14.1	12.2	12.0	14.1	16.7	16.7	19.5	19.9	19.7	19.0
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	23.55	23.81	23.96	24.56	26.55	27.67	28.50	29.42	29.61	29.68	29.22	28.56	
FEBRUARY.	2	19.2	21.5	24.9	23.7	26.0	28.1	29.3	29.9	30.2	30.2	29.9	29.7
	3	29.7	30.7	32.7	36.2	36.8	38.1	39.4	39.8	41.3	40.8	40.2	40.0
	4	28.8	29.0	29.2	30.6	31.8	33.3	34.1	35.2	36.0	36.0	35.2	34.5
	5	34.9	36.1	35.5	38.6	39.4	38.6	38.1	39.5	38.6	37.2	35.8	35.1
	6	24.0	24.1	27.1	26.0	31.1	36.2	38.6	38.3	38.9	39.0	38.6	36.5
	7	25.5	24.8	25.0	31.3	37.5	39.7	39.5	39.4	38.4	37.4	37.8	37.0
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	17.3	13.2	12.1	11.9	12.0	12.2	13.3	13.9	15.4	15.0	15.2	13.7
	10	3.6	4.5	4.9	9.3	13.4	15.6	16.6	21.9	22.3	21.8	21.8	21.7
	11	21.3	22.9	19.8	18.6	19.2	18.4	18.4	18.6	19.2	18.8	18.2	17.5
	12	2.8	5.3	5.4	5.9	10.2	13.0	16.2	18.9	21.2	22.2	20.9	20.5
	13	24.7	25.5	27.0	29.1	31.4	32.2	33.1	33.7	34.7	35.2	35.0	35.2
	14	15.6	18.6	24.1	23.8	27.2	32.2	34.0	34.4	34.5	33.7	32.4	32.0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	21.4	24.3	24.5	24.7	25.5	26.5	26.1	26.9	26.3	26.1	25.7	24.4
	17	18.4	19.2	20.2	23.6	25.9	28.6	30.1	29.7	30.1	31.0	29.7	27.1
	18	10.7	14.3	15.6	16.6	23.6	24.2	25.3	26.1	26.9	27.6	26.7	25.5
	19	6.4	11.8	14.6	19.6	27.2	27.7	28.3	29.2	28.9	26.9	28.2	27.1
	20	24.5	24.7	25.1	25.9	26.3	26.5	26.3	26.8	28.1	30.3	29.7	28.0
	21	25.5	26.1	27.1	28.8	30.6	31.0	31.6	30.8	29.0	29.9	28.6	26.1
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	12.4	15.4	16.6	21.1	23.8	24.7	25.4	24.7	25.4	25.4	23.6	20.0
	24	11.6	10.2	12.6	15.6	17.3	18.0	22.7	23.8	20.4	20.1	18.8	16.1
	25	0.3	1.8	3.6	7.8	10.9	14.1	16.6	16.4	17.2	16.5	15.5	14.0
	26	-11.2	-9.8	-5.6	0.8	4.9	3.9	5.8	7.2	8.4	7.4	6.0	4.9
	27	-12.1	-3.4	-9.5	1.4	7.0	11.3	14.0	15.2	15.8	15.0	14.5	13.0
	28	11.3	11.8	12.4	14.9	16.7	18.3	18.5	17.7	18.1	19.4	19.2	18.5
	March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	15.04	16.10	16.75	20.27	23.15	24.68	26.11	26.58	26.05	26.90	26.26	25.68	

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
32.4	33.2	31.2	31.6	33.0	33.4	33.2	33.6	33.8	33.6	33.4	33.4	33.8	33.2	33.3	33.63
35.9	35.5	35.1	33.4	31.4	33.1	32.8	32.5	32.4	29.6	29.2	29.0	29.0	28.8	29.5	31.03
35.9	35.6	35.3	31.9	31.5	34.2	31.3	32.1	31.6	—	—	—	—	—	—	32.99
35.1	31.8	33.1	—	28.4	28.2	28.8	29.0	28.2	28.0	25.9	25.1	24.4	23.6	26.3	29.79
31.5	32.8	32.7	33.5	34.7	31.1	33.7	33.1	33.1	33.5	33.9	33.9	34.7	34.7	33.7	33.15
36.5	35.6	35.6	34.7	34.7	35.2	35.2	34.9	35.1	35.2	36.1	35.4	35.1	34.1	33.8	35.37
33.9	33.5	33.1	32.3	32.0	30.8	30.1	29.8	29.8	29.5	29.2	29.0	29.1	29.0	28.5	31.88
29.1	30.2	30.7	31.0	30.0	29.6	29.2	28.7	28.6	28.6	28.6	28.4	29.2	29.9	29.9	28.89
31.2	29.9	29.5	29.5	29.9	30.3	30.4	31.2	31.0	—	—	—	—	—	—	29.48
25.3	24.1	23.7	22.6	22.0	21.1	19.9	18.3	16.4	27.1	27.1	26.6	26.1	26.1	25.3	29.48
21.0	23.1	21.3	20.2	16.3	22.2	22.8	22.5	22.7	14.8	14.3	13.7	13.3	12.0	10.5	20.96
35.0	31.6	32.5	31.3	26.3	25.0	29.5	28.6	28.4	24.2	24.4	25.9	26.9	27.4	28.5	21.13
40.5	38.1	38.8	30.0	40.0	39.5	37.2	38.2	37.1	25.9	30.4	22.1	20.0	19.4	18.8	28.11
26.7	26.1	27.1	21.8	21.3	23.3	22.3	21.5	20.0	36.6	35.8	34.3	33.7	32.4	30.6	35.11
12.5	10.3	9.2	8.0	8.8	8.0	7.1	6.0	4.3	19.0	17.5	15.8	15.4	13.4	11.6	24.21
15.8	16.2	11.3	12.1	11.6	10.1	8.9	8.0	7.0	10.5	9.9	9.0	8.4	7.9	7.4	9.18
22.0	22.0	22.1	21.9	22.9	23.3	25.0	24.7	24.7	5.7	5.9	7.2	7.3	7.5	8.2	10.20
25.1	25.6	25.5	24.2	23.0	20.6	17.1	13.5	11.6	21.8	21.9	21.9	22.1	22.3	21.9	19.53
18.9	18.8	17.1	15.1	14.5	13.7	13.2	13.0	12.6	8.8	6.0	3.3	1.2	1.0	0.4	17.05
21.9	22.3	20.8	20.0	18.8	18.2	16.5	16.0	14.9	9.7	12.1	7.7	6.5	4.4	2.9	10.22
31.9	31.7	33.5	32.7	31.0	31.4	32.2	32.0	33.5	11.8	11.4	15.9	16.1	17.3	15.8	15.58
37.5	36.6	37.1	33.9	33.1	31.8	31.1	30.6	29.7	—	—	—	—	—	—	30.15
23.7	22.7	22.3	22.7	25.3	27.8	26.9	28.0	29.2	32.4	31.8	31.6	31.6	33.1	33.5	32.28
37.3	35.9	37.2	31.9	31.5	34.7	31.0	33.7	33.3	28.4	28.2	26.9	23.4	21.3	19.2	31.04
35.2	35.6	34.6	36.1	36.4	36.4	37.1	36.3	36.2	33.1	31.7	31.9	32.2	32.4	33.1	31.04
40.8	40.6	39.1	39.9	39.8	40.9	40.2	38.2	36.9	37.1	36.1	36.7	36.1	36.7	36.7	35.92
19.9	19.7	19.6	17.5	15.3	14.2	13.7	14.6	10.5	—	—	—	—	—	—	36.30
—	—	—	—	—	—	—	—	—	16.9	17.6	15.4	16.0	16.0	17.7	15.85
20.68	19.22	28.56	27.97	27.31	27.15	26.80	26.22	25.72	24.93	24.72	24.02	23.71	23.27	22.91	26.26
30.2	29.9	29.7	29.5	29.9	29.9	31.4	32.0	31.8	30.6	30.3	30.8	31.0	31.2	29.9	28.66
40.8	40.2	40.0	38.6	38.0	36.8	35.4	35.2	33.6	32.4	31.9	31.4	30.1	29.7	29.5	35.35
36.0	35.2	34.5	34.0	35.6	36.1	37.2	39.2	39.5	38.7	37.4	37.2	36.5	36.2	35.2	31.92
37.2	35.8	35.1	34.6	34.1	32.1	32.1	31.4	31.2	30.7	29.6	28.2	27.8	26.9	25.3	33.79
39.0	38.6	36.5	34.9	34.5	34.2	33.9	34.2	34.2	30.3	28.2	27.6	26.5	26.5	25.3	32.17
37.1	37.8	37.0	37.1	32.7	29.0	23.2	20.2	18.2	—	—	—	—	—	—	29.20
15.0	15.2	13.7	11.3	9.9	8.4	7.4	7.4	6.9	21.3	21.1	20.8	20.6	20.5	19.9	19.9
21.8	21.8	21.7	25.0	25.7	26.5	25.0	25.8	26.9	4.9	4.7	4.7	3.9	3.6	3.5	10.08
18.8	18.2	17.5	17.3	16.1	14.8	14.1	13.4	12.6	26.4	25.5	22.7	22.3	21.6	21.5	20.26
22.2	20.9	20.5	18.8	18.5	17.8	17.7	18.0	19.6	11.3	11.2	11.1	3.5	—	1.4	14.73
35.2	35.0	34.2	30.3	31.0	32.0	30.6	29.8	25.0	19.7	21.5	22.5	23.1	23.8	24.4	15.89
33.7	32.1	32.0	31.8	31.0	29.7	29.5	29.7	28.0	16.0	17.3	13.0	13.0	13.5	15.3	26.97
26.1	25.7	24.1	—	—	—	—	—	—	—	—	—	—	—	—	26.70
31.0	29.7	27.1	22.8	22.9	22.9	21.9	21.5	20.4	18.0	18.4	20.0	20.2	20.6	20.2	22.67
27.6	26.7	25.5	25.4	24.3	23.7	22.9	22.5	21.3	21.1	19.4	18.2	10.1	6.1	4.1	22.21
26.9	28.2	27.1	17.9	13.2	10.7	10.7	10.1	9.9	8.4	6.4	7.3	6.0	5.7	5.5	15.50
30.3	29.7	28.6	28.1	28.7	25.0	25.5	25.5	25.5	25.7	25.1	24.2	24.0	24.0	24.3	24.12
29.9	28.6	26.1	27.1	25.9	24.6	25.5	26.3	26.3	24.6	23.7	25.7	26.2	26.7	26.6	26.35
—	—	—	25.0	25.0	23.4	23.2	20.9	20.0	—	—	—	—	—	—	24.01
25.1	23.6	20.0	19.8	18.8	17.2	16.2	17.0	15.4	17.1	17.3	16.4	15.7	14.1	13.1	18.44
20.1	18.8	16.1	14.2	10.7	8.9	7.2	5.3	3.1	15.4	14.5	14.5	12.4	11.6	11.6	11.46
16.5	15.5	14.0	13.0	10.9	8.2	5.5	5.9	5.1	6.4	3.9	—	2.3	0.8	0.4	7.41
7.4	6.0	4.9	2.7	0.1	0.2	—	8.9	—11.0	—12.8	—14.5	—15.3	—16.2	—12.2	—10.4	—3.96
15.0	14.5	13.0	11.8	11.1	11.1	11.0	10.7	10.5	10.7	11.0	11.1	11.0	11.8	11.6	8.98
19.4	19.2	18.5	17.8	17.3	16.6	16.4	16.0	15.0	—	—	—	—	—	—	16.04
—	—	—	—	—	—	—	—	—	16.4	15.6	14.8	14.5	13.9	13.7	—
26.90	26.26	25.68	23.75	22.75	21.63	20.61	19.46	19.33	18.02	19.23	16.13	16.08	15.62	14.18	20.86

STANDARD THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	2	13°2	14°3	17°5	20°8	23°4	24°4	24°2	25°6	26°1	26°6	26°7	25°7
	3	9°5	10°3	14°8	23°4	28°0	29°3	30°0	29°9	30°2	30°3	30°3	29°0
	4	14°0	26°1	26°3	32°3	34°1	35°7	37°2	38°2	38°1	37°4	37°3	38°2
	5	32°0	31°0	33°5	35°3	38°2	39°1	37°8	38°0	39°8	43°6	39°8	43°6
	6	28°0	28°2	29°6	31°4	29°7	29°7	31°0	29°7	30°3	29°7	29°7	28°3
	7	10°3	13°7	17°5	24°0	27°4	28°6	29°5	28°8	29°0	30°6	30°7	30°3
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	33°7	33°7	34°7	35°9	37°7	37°2	37°3	37°1	36°2	36°0	36°2	35°6
	10	28°7	30°3	35°3	38°3	39°3	39°0	39°5	39°4	39°8	40°2	40°1	39°2
	11	25°9	24°9	32°3	37°8	39°7	39°2	39°2	39°7	39°5	39°9	40°4	40°0
	12	33°6	36°3	37°8	40°2	42°4	43°1	42°6	43°8	41°1	39°8	39°7	39°8
	13	39°0	39°2	38°4	39°8	40°4	41°3	42°0	42°4	43°3	43°5	45°0	43°1
	14	35°4	36°2	38°0	38°9	39°5	39°3	39°3	39°5	38°2	37°9	37°4	34°0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	29°9	29°6	29°7	28°8	29°2	29°6	29°1	29°9	31°2	31°6	32°8	33°3
	17	25°9	26°1	26°9	27°8	28°8	29°0	30°8	33°1	34°7	36°0	35°4	33°9
	18	22°5	24°9	26°7	31°4	36°0	38°2	38°2	39°2	39°5	39°7	39°4	37°5
	19	35°0	36°8	38°2	42°8	44°7	46°2	47°5	49°2	46°4	45°0	40°8	40°7
	20	27°4	30°1	36°8	43°3	40°9	42°8	44°5	45°4	47°6	46°4	41°9	42°1
	21	33°1	33°1	33°2	33°1	33°5	34°2	34°9	36°3	37°2	38°0	38°6	38°6
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	34°1	35°6	37°7	39°6	40°8	42°1	42°6	43°3	42°2	40°8	41°0	40°6
	24	38°6	39°2	39°5	40°4	40°4	39°5	39°5	39°5	40°0	41°2	39°5	40°0
	25	38°8	39°2	39°4	39°4	40°3	40°8	41°0	42°2	40°7	40°8	39°9	39°1
	26	35°2	35°8	37°0	41°6	42°4	44°5	44°1	45°1	46°7	43°8	40°0	38°4
	27	35°7	37°0	38°1	38°6	42°5	42°4	43°0	42°5	44°4	41°5	40°4	38°0
	28	34°5	34°7	36°4	37°4	39°4	41°3	40°0	39°5	39°8	38°2	37°6	36°6
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	31°6	33°7	34°4	35°6	37°4	38°0	39°4	40°2	39°5	39°4	37°8	38°2
	31	28°4	32°9	35°6	37°4	39°1	42°4	40°6	40°4	41°3	41°9	40°4	40°3
	Hourly Means	29°00	30°27	32°51	35°20	36°74	37°57	37°88	38°38	38°55	38°45	37°76	37°09
APRIL.	1	29°2	51°8	35°2	38°9	40°3	41°5	41°7	41°5	42°2	41°9	43°0	41°0
	2	29°6	33°5	38°2	39°0	39°2	40°7	41°7	41°2	41°7	42°3	40°6	40°1
	3	31°2	35°6	40°3	40°7	41°9	43°0	44°2	44°7	45°4	45°4	45°9	44°0
	4	34°9	38°6	40°2	42°6	43°8	44°9	45°8	45°8	47°8	48°8	49°6	49°3
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	42°1	41°5	42°1	43°6	48°2	50°7	51°0	52°5	51°1	50°5	51°0	49°2
	7	41°0	45°9	49°0	51°7	55°1	55°1	54°4	54°2	53°2	51°7	55°7	52°7
	8	33°9	34°9	36°4	36°9	37°9	39°8	39°4	41°3	41°9	42°4	42°4	42°2
	9	24°5	33°5	37°6	41°8	42°7	44°3	46°2	48°0	48°6	47°8	43°2	39°8
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	38°8	38°7	41°3	49°6	52°2	55°0	55°8	53°4	49°0	45°6	43°9	41°2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	26°8	27°5	28°0	29°2	32°7	33°9	35°6	36°7	38°8	38°8	39°0	37°4
	14	28°2	34°3	38°6	41°5	43°5	44°4	43°2	43°2	42°6	44°7	44°2	44°0
	15	30°8	30°1	30°3	31°8	34°1	35°8	38°0	39°0	40°6	40°4	41°9	41°9
	16	27°4	33°5	38°2	40°6	43°4	43°4	43°7	45°8	46°6	45°7	41°3	39°9
	17	33°5	41°9	45°4	51°2	51°8	54°1	54°5	55°6	54°9	55°9	56°2	56°6
	18	54°2	52°8	51°4	53°3	49°3	51°4	50°0	55°3	53°8	56°7	56°6	57°8
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	31°2	39°4	44°9	46°8	50°4	54°0	56°6	59°0	62°2	61°5	60°9	58°8
	21	44°5	53°2	58°5	62°3	64°6	67°9	70°8	70°8	79°1	74°6	71°4	62°9
	22	43°0	44°4	44°7	45°2	45°8	46°4	48°0	50°5	50°6	50°2	51°6	48°4
	23	49°2	50°9	50°8	47°4	50°3	51°8	53°8	54°5	55°3	55°0	54°8	55°3
	24	50°8	51°3	51°3	51°9	53°2	53°8	54°6	56°1	54°5	55°2	55°8	56°0
	25	43°8	44°2	43°4	44°3	44°3	42°6	42°3	44°4	46°2	45°0	44°6	44°7
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	42°9	49°6	52°8	56°6	57°2	57°0	56°4	55°9	54°7	56°2	57°8	58°0
	28	46°6	53°6	53°4	54°0	53°6	55°6	55°3	55°7	57°2	59°2	59°9	61°0
	29	46°2	46°0	45°8	48°1	49°6	49°2	50°5	49°0	48°0	48°2	47°6	48°7
	30	48°5	49°4	51°2	48°8	49°0	52°1	54°2	56°1	57°7	54°8	55°3	54°2
Hourly Means	38°23	41°44	43°56	45°39	46°84	48°34	49°11	50°01	50°54	50°46	50°17	48°90	

\* Good Friday.

STANDARD THERMOMETER.

9	10	11
3	4	5
26.6	26.7	25.7
30.3	30.3	29.0
37.4	37.3	38.2
43.6	39.8	43.6
29.7	29.7	28.3
30.6	30.7	30.3
—	—	—
36.0	36.2	35.6
40.2	40.1	39.2
39.9	40.1	40.0
39.8	39.7	39.8
43.5	45.0	43.1
37.9	37.4	31.0
—	—	—
31.6	32.8	33.3
36.0	35.4	33.9
39.7	39.4	37.5
15.0	40.8	40.7
46.4	41.9	42.1
38.0	38.6	38.6
—	—	—
40.8	41.0	40.6
41.2	39.5	40.0
40.8	39.9	39.1
43.8	40.0	38.4
41.5	40.4	38.0
38.2	37.6	36.6
—	—	—
39.4	37.8	38.2
41.9	40.4	40.3
—	—	—
38.45	37.76	37.09
—	—	—
41.9	43.0	41.0
42.3	40.6	40.1
45.4	45.9	41.0
48.8	49.6	49.3
—	—	—
50.5	51.0	49.2
51.7	55.7	52.7
42.4	42.4	42.2
47.8	43.2	39.8
—	—	—
45.6	43.9	41.2
—	—	—
38.8	39.0	37.4
44.7	41.2	41.0
40.4	41.9	41.9
45.7	41.3	39.9
55.9	56.2	56.6
56.7	56.6	57.8
—	—	—
61.5	60.9	58.8
74.6	71.4	62.9
50.2	51.6	48.4
55.0	54.8	55.3
55.2	55.8	56.0
45.0	44.6	44.7
—	—	—
56.2	57.8	58.0
59.2	59.9	61.0
48.2	47.6	48.7
54.8	55.3	51.2
50.46	50.17	48.90

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
29.2	16.1	15.6	12.9	12.5	9.2	8.6	7.6	8.4	10.1	8.2	10.3	17.08
28.0	23.0	18.6	16.9	17.1	16.6	21.5	21.1	22.1	19.8	16.9	15.5	22.17
39.0	38.4	37.5	36.9	36.8	35.4	31.8	31.2	33.1	33.7	34.9	34.1	33.94
41.0	39.5	36.6	32.2	32.2	29.6	26.8	27.6	27.9	29.2	28.7	28.4	31.64
24.6	20.8	17.1	15.0	13.2	13.1	10.5	10.2	9.2	8.1	9.2	8.6	21.47
30.1	30.1	30.3	30.6	30.1	29.5	—	—	—	—	—	—	—
—	—	—	—	—	—	35.7	35.7	35.1	31.5	33.9	33.7	28.74
31.5	31.4	29.2	31.6	32.7	32.9	33.7	31.1	33.7	32.2	29.7	—	31.22
36.1	30.6	28.2	28.0	27.1	26.9	25.5	26.1	26.9	26.9	25.7	25.3	32.60
38.0	35.6	31.7	33.4	33.5	33.3	32.2	31.6	31.0	31.0	31.6	31.8	31.84
39.8	39.6	38.2	29.2	40.0	40.1	39.9	39.8	40.2	40.3	38.6	38.4	39.76
41.0	39.7	37.5	37.2	36.9	36.9	37.0	36.1	35.6	35.6	35.2	36.2	39.25
33.5	31.6	31.2	31.2	30.8	30.8	—	—	—	—	—	—	—
—	—	—	—	—	—	31.9	32.4	31.6	30.8	30.4	30.6	31.60
31.4	29.0	27.8	25.7	24.8	24.4	25.9	25.6	24.9	24.2	23.8	24.9	28.21
32.2	28.4	27.4	25.6	24.6	23.3	21.7	21.5	21.6	21.9	21.8	20.4	27.45
35.0	33.6	32.4	33.5	33.9	33.3	32.9	31.6	31.6	31.1	31.6	35.2	31.20
39.0	37.6	35.4	31.3	31.0	30.1	29.2	30.1	30.1	28.4	28.4	29.0	37.33
40.1	40.0	42.3	37.8	38.2	38.2	36.6	35.8	35.8	35.4	31.1	33.2	39.17
37.2	31.5	31.1	27.6	26.8	27.8	—	—	—	—	—	—	—
—	—	—	—	—	—	31.3	31.3	35.2	31.7	33.9	33.7	33.97
40.4	39.1	38.4	38.3	38.4	39.0	39.3	39.5	39.5	39.0	38.5	38.6	39.52
40.0	40.7	41.6	41.3	41.7	40.4	39.8	38.7	38.4	38.3	38.4	38.4	39.79
39.3	39.3	39.6	39.3	38.6	38.4	37.8	36.8	36.4	35.8	35.4	35.0	38.90
38.2	37.0	37.0	36.4	36.2	36.6	36.4	36.2	35.8	36.0	35.4	36.0	38.82
38.4	37.6	38.2	37.8	37.0	37.2	36.8	35.9	35.5	34.5	34.5	34.8	38.43
35.4	34.7	34.7	35.0	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	29.2	30.2	30.6	30.2	30.3	30.3	30.34
37.2	35.6	33.9	31.2	29.6	29.0	31.2	32.3	31.8	31.8	30.8	29.7	31.55
41.2	36.0	35.3	33.5	31.9	30.8	29.8	27.1	26.9	29.0	29.0	29.2	35.02
—	—	—	—	—	—	—	—	—	—	—	—	—
35.89	33.83	32.70	31.63	31.15	30.65	30.62	30.59	30.46	30.21	29.69	29.65	33.61
—	—	—	—	—	—	—	—	—	—	—	—	—
39.0	33.3	31.0	30.1	28.8	29.5	29.5	28.8	26.9	26.3	25.5	27.6	31.35
37.8	33.3	30.3	29.5	29.5	29.7	30.1	30.6	29.9	30.1	29.7	28.8	31.89
41.5	35.6	34.1	32.2	31.1	35.2	35.7	34.5	32.9	30.3	32.0	32.2	38.03
45.8	45.0	45.2	43.0	41.9	40.3	—	—	—	—	—	—	—
—	—	—	—	—	—	46.9	46.5	46.7	46.7	45.5	43.2	44.53
49.1	48.2	48.0	46.3	46.8	45.9	45.4	45.0	44.7	43.6	43.2	42.6	46.76
51.5	50.6	50.2	47.6	48.0	45.4	44.2	42.2	39.5	36.8	36.6	35.1	48.06
40.2	37.4	36.0	32.9	32.0	32.0	28.6	27.5	26.6	25.7	26.1	24.4	34.95
38.4	36.8	36.8	36.6	35.4	35.0	—	—	—	—	—	—	—
—	—	—	—	—	—	42.4	41.7	41.3	41.0	40.0	39.3	40.11
39.1	38.0	37.5	36.4	35.8	34.9	—	—	—	—	—	—	—
—	—	—	—	—	—	26.9	26.9	26.8	26.5	26.5	26.8	39.44
35.6	33.5	29.7	27.6	27.4	28.1	28.6	28.3	27.4	28.1	28.4	28.2	31.48
39.8	37.6	36.1	36.1	35.6	35.8	34.6	34.1	32.1	31.4	30.9	31.6	37.77
39.5	34.8	31.0	28.9	27.6	27.6	27.1	—	26.6	26.0	26.0	24.8	32.81
39.7	39.8	39.7	40.3	39.5	39.5	39.5	39.5	—	38.8	36.0	33.5	39.80
56.1	51.9	49.3	44.9	43.0	42.2	40.8	39.4	42.1	41.0	46.1	53.2	48.40
56.4	53.4	50.0	49.7	45.0	42.2	—	—	—	—	—	—	—
—	—	—	—	—	—	32.5	32.8	31.6	31.0	30.1	29.2	46.94
56.2	55.8	51.9	51.5	51.5	46.6	47.2	50.2	45.5	44.9	45.6	46.0	51.03
57.0	55.5	52.7	51.6	50.9	51.0	50.3	50.0	50.0	44.8	42.9	42.6	57.50
46.5	44.6	43.6	44.0	43.4	44.4	46.0	46.2	46.3	46.0	47.2	47.8	46.45
54.8	54.1	53.1	53.2	51.5	55.3	55.8	55.3	54.0	50.6	50.4	50.8	52.96
54.5	48.4	46.0	46.2	47.6	49.2	49.4	50.1	50.1	49.4	49.4	44.7	51.23
44.7	44.0	43.0	42.8	44.7	44.6	—	—	—	—	—	—	—
—	—	—	—	—	—	39.8	41.3	40.7	40.4	39.5	39.3	42.86
56.1	50.1	45.4	43.8	43.8	43.1	43.2	42.8	39.7	39.2	37.2	37.2	49.03
59.4	57.8	50.7	49.1	47.8	44.7	44.8	45.3	47.8	48.6	48.4	47.4	52.39
48.8	48.7	48.2	47.6	47.2	46.8	46.8	46.8	46.6	47.2	47.2	47.8	47.78
54.4	52.6	51.2	50.2	50.8	50.6	50.4	50.3	51.0	50.9	52.3	52.1	52.02
—	—	—	—	—	—	—	—	—	—	—	—	—
47.28	44.83	42.96	41.82	41.30	40.80	40.26	40.69	39.45	38.61	38.51	38.26	44.09



STANDARD THERMOMETER.												
Hours of Mean Gattingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MAY.												
1	53°5	54°2	55°0	55°0	56°0	56°6	55°7	55°7	56°8	55°3	53°8	53°2
2	52°7	54°1	55°1	55°3	56°9	56°1	56°2	58°6	59°0	58°0	58°0	58°0
3	—	—	—	—	—	—	—	—	—	—	—	—
4	42°4	53°0	57°6	59°8	62°7	63°8	65°7	64°7	65°0	64°9	66°9	66°5
5	45°8	51°4	58°0	59°1	55°5	54°5	58°8	62°1	62°9	61°7	64°3	59°5
6	54°8	55°9	56°3	56°6	53°9	52°9	52°3	52°3	53°6	55°7	55°8	56°0
7	49°0	53°2	54°5	55°1	54°7	56°4	57°1	57°8	55°3	56°4	56°2	56°2
8	51°3	55°2	56°9	59°5	60°7	61°7	61°3	62°1	61°7	59°7	58°8	57°8
9	54°5	55°1	56°0	55°1	55°1	54°5	55°1	55°8	55°7	55°8	56°3	57°0
10	—	—	—	—	—	—	—	—	—	—	—	—
11	35°8	37°0	37°0	36°9	38°0	40°0	42°2	42°6	44°6	46°2	47°2	47°1
12	44°2	47°1	50°0	53°0	55°3	57°4	58°8	58°8	60°5	61°3	60°6	63°1
13	43°2	46°2	47°0	54°3	57°7	60°5	63°0	64°2	65°5	67°7	68°3	69°4
14	54°2	58°0	60°0	64°2	65°5	64°7	65°1	65°3	67°1	64°2	69°3	66°9
15	50°6	50°8	50°0	51°7	54°0	54°4	57°9	59°9	57°4	59°4	62°4	59°7
16	47°6	49°2	51°2	58°8	59°8	61°4	60°4	61°5	61°3	60°5	61°9	60°1
17	—	—	—	—	—	—	—	—	—	—	—	—
18	54°1	53°9	53°1	51°7	55°3	55°8	55°5	54°2	53°1	53°3	53°0	51°6
19	39°0	42°5	44°9	47°2	48°7	50°8	50°4	51°6	51°0	55°1	55°2	53°8
20	41°4	48°7	53°2	57°2	61°3	64°0	64°6	65°1	66°5	66°1	65°7	64°9
21	42°8	44°7	45°4	45°8	46°6	46°8	47°4	48°2	49°3	51°5	50°3	49°6
22	42°4	47°4	49°0	53°8	54°9	57°6	56°6	56°6	57°8	56°5	55°9	54°5
23	50°1	51°3	56°4	57°4	61°3	61°5	65°1	69°6	69°8	68°1	66°4	66°1
24	—	—	—	—	—	—	—	—	—	—	—	—
25	60°7	61°9	67°2	69°2	69°4	69°0	71°1	71°4	73°0	70°0	68°4	69°3
26	61°1	65°7	70°1	71°6	71°2	71°3	73°3	76°2	74°2	73°6	72°2	72°0
27	65°7	71°8	73°4	74°6	74°2	75°1	75°6	75°8	76°7	76°0	77°6	78°1
28	59°3	63°4	65°1	65°7	69°2	68°0	69°3	71°9	70°6	68°5	67°1	68°6
29	57°4	62°3	66°7	69°3	70°8	69°2	70°0	70°1	70°8	69°5	68°6	64°2
30	59°6	58°2	60°9	63°1	69°6	71°2	71°8	72°8	71°4	72°3	72°1	72°1
31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	50°84	53°78	55°96	58°00	59°32	60°05	60°90	61°73	62°11	61°92	61°97	61°33
JUNE.												
1	59°8	61°7	66°2	64°6	61°9	65°3	69°4	69°9	69°4	69°3	72°0	73°0
2	63°5	69°3	64°7	68°4	65°9	65°9	62°5	65°0	65°7	66°1	66°2	65°7
3	56°2	59°9	62°9	66°2	63°1	65°7	64°6	64°1	67°7	69°1	68°0	71°0
4	60°4	61°2	63°5	64°0	65°2	64°0	67°7	69°6	66°1	60°7	61°9	61°5
5	56°1	55°7	54°4	54°2	54°3	54°2	55°1	57°2	57°8	61°1	58°0	58°6
6	45°0	49°1	51°2	51°5	55°3	56°4	57°9	56°6	55°8	56°6	58°0	58°9
7	—	—	—	—	—	—	—	—	—	—	—	—
8	48°0	55°3	59°5	61°9	66°3	65°7	65°1	65°6	65°3	66°2	67°5	66°9
9	51°4	55°8	62°1	66°0	68°2	68°3	66°9	67°1	68°7	69°1	69°6	69°0
10	53°4	58°2	64°7	66°2	66°5	69°4	71°6	72°2	71°1	74°7	71°9	71°8
11	58°2	63°1	65°0	68°7	69°9	67°5	64°6	62°5	63°3	66°3	65°7	67°9
12	52°6	54°5	56°5	59°2	61°5	59°5	59°2	59°7	60°3	61°1	62°3	62°7
13	58°4	62°5	62°3	65°5	65°3	64°7	61°6	64°6	65°5	63°9	62°7	62°0
14	—	—	—	—	—	—	—	—	—	—	—	—
15	60°4	63°4	67°3	71°8	71°2	73°7	74°4	74°5	74°4	74°6	74°6	77°5
16	60°7	62°9	65°7	68°1	69°0	67°5	68°7	69°1	69°1	69°4	69°3	69°8
17	56°0	62°0	66°7	70°2	71°2	72°6	73°8	74°8	75°0	76°4	75°2	73°2
18	61°7	62°9	64°2	69°8	73°6	74°8	75°6	77°8	73°3	70°4	76°2	75°9
19	67°5	68°7	68°4	69°1	71°2	75°0	76°9	78°9	79°5	80°3	80°5	80°5
20	59°2	59°5	59°7	60°1	60°7	60°3	60°0	60°5	60°7	59°4	59°7	59°0
21	—	—	—	—	—	—	—	—	—	—	—	—
22	54°3	55°8	58°0	60°3	61°1	66°5	65°7	68°1	68°1	67°9	66°7	65°3
23	58°4	61°9	63°6	67°3	71°0	72°8	73°7	74°2	74°4	75°0	75°2	74°6
24	60°7	64°6	66°4	69°3	72°6	75°0	77°8	78°2	78°9	77°3	79°3	78°7
25	66°1	68°4	71°8	75°7	78°5	80°9	81°9	83°3	81°2	79°9	79°7	78°5
26	64°2	64°9	67°7	68°9	73°6	76°0	75°5	75°1	78°7	80°3	75°6	76°5
27	63°0	68°0	66°9	67°7	69°1	71°6	73°2	71°4	69°3	68°6	69°3	69°6
28	—	—	—	—	—	—	—	—	—	—	—	—
29	65°1	64°9	65°9	68°4	72°0	73°6	74°2	76°2	75°0	75°2	77°1	76°4
30	69°0	72°1	71°2	75°6	76°2	77°8	77°8	77°8	78°3	78°5	79°1	79°9
Hourly Means	58°81	61°78	63°83	66°21	67°59	68°64	69°17	69°79	69°87	69°90	70°17	70°17

STANDARD THERMOMETER.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
53.4	53.0	52.6	53.9	51.5	52.5	51.8	51.6	51.4	51.9	52.1	52.4	53.84
58.4	55.2	50.6	48.3	47.3	49.0	—	—	—	—	—	—	52.39
—	—	—	—	—	—	44.5	43.0	41.5	40.8	41.1	40.6	54.78
61.0	58.8	51.4	51.0	49.8	47.0	46.2	44.4	42.6	41.7	41.3	40.4	55.45
39.0	37.0	51.6	51.4	51.7	52.0	52.0	51.2	51.0	51.0	50.6	53.6	50.27
54.4	50.8	48.6	47.8	46.0	44.4	44.4	44.9	44.3	42.4	41.4	41.0	52.71
55.8	54.4	53.0	50.2	49.0	47.8	48.7	49.3	48.2	49.2	48.0	49.6	57.30
58.2	57.1	55.8	55.8	56.0	55.7	55.8	56.0	55.1	54.9	53.8	54.2	51.86
57.6	57.8	58.4	58.8	58.4	58.4	—	—	—	—	—	—	47.28
—	—	—	—	—	—	42.8	40.8	38.4	36.2	35.4	35.6	41.78
47.6	45.9	41.4	41.3	40.4	41.2	41.0	41.3	41.3	41.7	41.9	42.9	49.84
60.6	63.1	—	—	—	—	—	—	—	—	—	—	59.56
68.3	61.7	58.8	56.7	62.2	62.9	59.9	60.7	58.2	56.8	54.9	51.3	62.61
69.3	62.1	61.1	61.1	61.3	59.9	64.6	63.6	63.0	57.0	56.7	52.0	52.25
61.9	62.1	61.1	61.1	61.3	59.9	64.6	63.6	63.0	57.0	56.7	52.0	56.13
62.4	59.7	—	—	—	—	—	—	—	—	—	—	47.28
61.9	60.1	—	—	—	—	—	—	—	—	—	—	46.19
—	—	—	—	—	—	56.2	56.0	55.1	54.9	54.5	54.5	54.02
53.0	—	—	—	—	—	—	—	—	—	—	—	43.05
55.2	—	—	—	—	—	—	—	—	—	—	—	51.78
65.7	—	—	—	—	—	—	—	—	—	—	—	59.14
61.9	—	—	—	—	—	—	—	—	—	—	—	65.97
65.7	—	—	—	—	—	—	—	—	—	—	—	67.80
59.3	—	—	—	—	—	—	—	—	—	—	—	67.80
59.3	—	—	—	—	—	—	—	—	—	—	—	61.32
66.1	—	—	—	—	—	—	—	—	—	—	—	64.67
—	—	—	—	—	—	—	—	—	—	—	—	55.55
—	—	—	—	—	—	—	—	—	—	—	—	61.95
68.4	67.6	61.1	61.6	63.3	62.5	62.2	61.2	60.5	60.5	59.7	60.9	60.91
62.9	59.0	63.1	60.3	55.8	53.2	52.0	51.2	51.8	50.2	49.2	49.6	62.94
69.5	64.5	62.0	62.1	60.5	60.1	59.4	59.1	59.4	58.2	58.2	58.8	61.38
61.5	61.9	58.8	58.8	59.1	59.1	58.8	59.2	57.4	56.6	56.5	56.4	52.79
58.4	56.6	51.4	48.5	50.1	49.1	49.0	48.0	45.4	44.2	43.4	42.8	51.50
58.1	55.1	48.2	45.6	43.0	41.5	—	—	—	—	—	—	55.17
—	—	—	—	—	—	51.5	50.8	49.3	48.3	44.5	42.8	58.46
61.4	60.3	53.2	50.1	49.3	48.5	48.0	46.2	44.7	41.0	43.8	45.0	63.60
68.0	62.0	55.8	52.2	50.0	50.4	49.0	47.1	47.1	46.0	46.2	46.4	60.20
60.1	66.9	62.5	59.7	59.9	58.0	56.8	54.5	55.4	55.8	54.5	55.4	57.27
66.3	62.7	57.4	55.3	52.6	51.7	55.3	54.0	53.0	51.4	50.2	49.3	60.45
61.2	58.0	54.9	52.2	52.4	51.8	54.2	57.9	58.0	56.1	54.6	51.1	58.4
61.4	60.3	59.4	56.3	54.6	53.8	—	—	—	—	—	—	68.75
—	—	—	—	—	—	56.4	57.0	57.0	57.0	57.2	58.4	50.6
74.6	74.6	77.5	76.3	73.0	69.9	67.5	65.7	65.1	64.2	63.3	62.5	60.5
69.4	69.3	69.8	68.1	64.0	61.3	59.5	56.6	57.4	57.4	56.0	53.9	51.0
63.4	75.2	73.2	72.4	68.9	66.5	62.0	60.3	59.6	60.5	60.1	58.7	59.7
60.4	76.2	73.9	76.7	75.0	68.9	68.2	67.4	65.7	64.7	63.5	62.3	63.2
80.5	80.5	79.7	76.7	69.4	68.5	65.5	66.0	65.2	62.3	60.1	59.3	59.2
69.4	59.7	59.0	58.3	57.1	57.2	54.7	54.4	53.0	—	—	—	52.4
—	—	—	—	—	—	—	—	—	—	—	—	55.5
69.7	69.7	65.3	62.7	61.3	59.0	57.4	55.3	53.6	54.5	54.4	51.7	55.3
75.2	74.6	74.6	71.2	67.3	65.3	63.8	61.8	61.3	60.5	60.2	57.8	57.6
79.3	78.7	78.7	77.1	73.3	68.1	66.7	64.7	65.6	64.9	64.7	63.8	63.3
79.7	78.5	78.5	74.6	74.2	71.0	69.3	67.1	66.6	66.1	64.7	64.2	64.6
75.6	76.5	76.5	72.6	71.6	70.4	69.4	67.9	68.1	65.9	65.7	65.1	63.8
69.3	69.6	69.6	69.3	66.5	64.7	63.8	63.3	—	—	—	—	61.9
—	—	—	—	—	—	—	—	—	—	—	—	59.3
—	—	—	—	—	—	—	—	—	—	—	—	61.5
77.1	76.4	76.4	73.6	72.2	69.4	67.0	65.5	65.7	65.9	66.1	64.0	63.1
8.5	79.1	79.9	79.3	76.2	72.2	71.3	70.3	69.6	66.9	65.1	64.4	63.0
—	—	—	—	—	—	—	—	—	—	—	—	63.4
—	—	—	—	—	—	—	—	—	—	—	—	65.7
—	—	—	—	—	—	—	—	—	—	—	—	63.48
68.59	65.65	62.65	60.62	59.30	58.65	58.45	57.94	57.25	56.44	55.92	56.03	63.48

STANDARD THERMOMETER.													
Hours of Mean Gettungen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto's Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JULY.	1	69.4	72.8	75.2	75.8	76.4	77.3	78.3	75.6	76.9	75.4	74.8	71.5
	2	65.3	67.3	68.1	68.2	70.2	72.8	75.5	76.2	74.9	75.3	75.4	75.0
	3	61.5	66.9	69.8	71.6	72.4	73.0	74.2	73.8	74.6	74.6	73.3	74.2
	4	58.0	66.6	71.3	72.0	74.5	77.3	77.8	75.4	78.9	75.1	78.2	75.8
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	63.8	67.4	69.9	73.2	75.8	77.5	78.2	79.9	81.1	80.3	80.9	81.1
	7	60.5	64.0	66.1	66.9	70.2	72.8	73.8	74.0	73.4	76.5	77.8	77.1
	8	62.2	64.3	63.0	64.4	67.9	69.9	72.2	75.0	78.0	79.1	80.1	77.3
	9	62.9	69.9	76.3	78.5	77.5	73.4	69.6	67.1	73.0	74.4	78.3	79.7
	10	76.9	80.4	85.2	86.1	89.9	91.9	91.0	77.3	87.0	90.5	90.9	89.9
	11	69.6	75.6	77.3	79.3	85.3	81.3	86.3	86.1	80.7	75.6	76.7	79.9
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	57.6	59.7	63.1	67.9	69.6	71.6	74.1	75.8	75.0	76.9	77.2	74.8
	14	52.2	55.8	58.6	60.5	61.5	62.9	64.9	61.0	64.9	63.9	62.9	61.5
	15	50.0	51.2	56.1	58.4	58.2	59.7	61.9	61.9	62.6	61.1	61.6	61.4
	16	54.0	59.7	61.7	63.6	61.9	62.7	65.3	66.5	69.1	68.3	69.3	70.4
	17	49.6	58.8	66.1	67.3	69.5	70.6	71.0	71.0	73.0	70.0	69.3	68.1
	18	56.2	63.5	66.7	69.1	70.6	71.6	72.8	73.8	74.4	74.1	75.0	74.6
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	66.7	69.6	69.1	72.6	75.4	75.7	76.8	77.1	77.5	78.6	78.5	76.5
	21	65.5	69.2	72.0	75.0	75.9	76.2	77.9	76.7	75.9	74.5	74.6	72.8
	22	61.4	66.1	66.7	70.0	69.3	70.6	71.7	75.8	73.9	75.8	73.4	72.1
	23	60.9	66.1	70.1	73.9	78.3	76.0	78.1	79.1	80.1	78.7	81.9	80.0
	24	66.9	66.9	65.4	65.6	65.7	66.3	65.8	65.6	68.1	71.4	68.9	70.9
	25	64.1	68.1	71.2	74.4	76.3	78.2	78.5	79.1	80.6	79.1	79.4	78.7
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	63.5	68.5	71.2	72.3	73.1	72.6	73.2	73.1	74.0	75.5	75.0	74.2
	28	62.6	66.1	70.0	72.9	75.3	75.5	71.1	74.0	75.4	76.0	75.4	75.2
	29	69.3	74.0	74.8	77.5	78.9	79.7	82.7	80.9	78.2	81.3	82.7	81.1
	30	72.4	75.2	78.0	78.9	80.5	79.9	79.5	82.9	81.5	84.9	81.5	82.7
	31	65.0	65.5	66.9	69.8	72.6	72.8	75.1	76.2	76.9	77.1	78.0	77.4
Hourly Means	62.63	66.75	69.24	71.32	73.17	73.81	75.05	74.59	75.65	75.73	76.07	75.29	
AUGUST.	1	62.4	66.9	70.2	73.2	74.5	75.2	76.2	76.0	76.7	77.1	76.4	76.0
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	59.7	65.5	70.4	73.4	75.2	76.9	78.7	80.3	81.3	81.5	81.1	79.5
	4	65.9	70.1	73.9	77.3	78.9	81.9	83.7	81.3	84.7	84.7	85.1	85.1
	5	69.4	73.6	76.7	79.7	81.9	83.7	84.4	85.9	86.1	85.9	85.3	85.3
	6	63.5	67.9	72.8	78.2	81.7	82.7	82.7	81.5	81.5	81.5	80.2	82.0
	7	65.4	68.9	72.1	75.4	76.9	79.9	81.0	82.3	82.2	81.3	80.3	79.5
	8	66.5	67.9	70.0	66.4	66.1	68.3	72.7	73.9	73.8	73.8	73.2	71.2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	67.2	67.4	68.6	70.6	73.8	74.6	74.6	76.2	77.3	78.3	77.5	76.0
	11	55.7	60.5	64.6	68.1	70.2	70.2	71.8	72.3	72.8	73.3	73.0	73.0
	12	55.7	62.5	68.7	72.8	76.4	77.0	78.4	80.1	80.9	81.3	79.7	78.7
	13	69.1	71.4	73.8	75.4	79.5	79.9	83.9	81.5	73.3	76.7	78.5	79.2
	14	64.7	66.3	71.8	75.2	77.1	77.3	77.3	76.4	77.3	78.0	79.3	77.1
	15	60.0	66.4	70.2	74.4	78.0	78.0	79.9	79.7	80.5	82.3	82.1	80.7
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	61.3	63.8	66.5	68.1	71.2	71.0	71.4	70.6	72.1	72.4	72.4	71.0
	18	50.4	53.3	55.7	59.1	62.3	63.3	64.1	64.4	64.4	65.3	65.3	65.6
	19	54.6	61.7	62.5	61.0	64.4	66.7	66.3	66.6	68.7	66.1	65.6	61.7
	20	61.5	61.9	62.1	62.8	63.8	64.5	65.5	67.3	67.5	67.7	68.3	68.7
	21	57.1	62.6	67.7	70.8	71.4	72.0	72.4	71.6	72.4	74.0	73.1	72.8
	22	64.4	65.1	65.3	65.3	66.3	69.1	71.0	70.7	73.5	71.3	70.3	68.3
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	57.0	60.3	62.9	66.4	67.9	67.5	67.5	67.7	68.1	69.3	69.2	69.3
	25	55.9	61.1	66.1	68.7	69.5	70.8	70.8	70.3	72.6	73.3	72.5	71.4
	26	56.4	64.9	69.6	71.6	71.9	71.8	74.3	74.8	74.4	73.8	73.8	71.8
	27	59.9	65.4	69.3	72.4	74.8	75.8	75.2	73.9	74.4	73.8	73.4	72.8
	28	62.1	64.4	67.9	68.5	72.0	73.3	75.2	76.2	76.9	75.4	73.9	71.4
	29	61.1	65.8	70.8	73.4	75.1	76.7	76.4	73.0	66.3	66.6	67.8	68.5
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	65.4	66.5	72.1	74.1	75.9	77.1	79.3	80.1	80.5	80.9	79.9	78.3
Hourly Means	61.24	65.10	68.56	70.97	72.95	74.05	75.13	75.83	75.39	75.60	75.28	71.33	

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
75.4	74.8	71.5	70.2	69.3	66.9	65.7	61.4	65.6	62.9	60.5	66.1	65.3	61.4	61.0	70.45
75.3	75.4	75.0	74.7	71.0	65.1	60.6	59.4	57.4	58.4	59.4	59.5	58.8	58.0	57.6	66.84
74.6	73.3	71.2	72.2	69.3	60.9	58.0	56.6	56.2	54.9	55.0	59.0	56.1	55.8	55.3	65.26
75.4	78.2	75.8	73.8	70.8	69.4	66.7	66.7	64.9	—	—	—	—	—	—	69.90
80.3	80.9	81.1	78.0	73.2	70.6	67.4	64.7	62.9	64.6	64.7	64.9	63.8	63.8	62.4	69.79
76.5	77.8	77.1	75.3	72.2	65.3	61.7	63.6	58.7	55.8	60.3	59.7	59.7	57.8	58.0	66.84
79.1	80.1	77.3	77.4	76.2	73.3	65.5	67.7	66.3	64.6	61.0	64.7	59.7	58.5	58.1	68.73
74.4	78.3	79.7	79.5	76.7	73.8	69.6	70.0	71.8	71.8	70.4	70.2	69.1	68.3	74.5	72.76
90.5	90.9	85.3	78.9	76.2	72.6	69.8	70.9	69.1	69.5	70.4	68.1	67.7	67.3	66.3	78.42
75.6	76.7	79.9	75.1	72.1	74.2	73.4	74.4	73.0	—	—	—	—	—	—	72.80
76.9	77.2	74.8	70.6	66.9	62.1	61.3	61.5	59.6	57.6	52.6	49.3	46.4	46.0	46.4	63.48
81.9	62.9	61.5	59.7	57.6	51.9	52.6	50.4	51.4	50.8	48.5	48.3	46.4	46.0	47.1	56.14
81.1	61.6	61.5	61.2	61.9	58.0	57.0	54.7	54.4	51.4	51.0	53.2	51.4	49.7	49.7	57.32
82.3	69.3	70.4	66.9	62.7	56.8	51.8	50.8	49.6	48.4	48.4	47.6	47.1	46.8	44.9	54.22
70.0	69.3	68.1	66.5	61.1	59.5	55.5	56.6	55.1	55.3	51.1	53.3	51.3	50.2	50.8	61.53
74.1	75.0	74.6	70.9	67.3	61.1	58.8	57.8	56.6	—	—	—	—	—	—	66.47
78.6	78.5	76.5	74.0	70.6	67.5	62.5	60.3	60.1	59.9	61.1	62.7	62.1	62.7	62.7	66.47
74.5	71.6	72.8	72.0	70.0	69.1	67.1	65.5	64.9	65.1	62.8	60.9	60.7	61.3	60.9	69.41
75.8	73.4	72.4	72.4	68.5	62.7	61.3	59.4	59.0	58.6	58.0	56.4	55.3	56.2	57.4	65.76
78.7	81.9	80.0	77.5	73.3	69.4	67.8	66.4	65.7	65.7	66.4	66.5	66.5	66.3	66.5	71.72
71.4	68.9	70.9	70.6	69.8	68.7	67.3	65.7	63.5	62.3	62.1	62.3	62.3	62.2	62.1	66.10
79.1	79.4	78.7	78.7	76.2	72.2	70.0	67.9	67.7	—	—	—	—	—	—	71.12
75.5	75.0	74.2	73.0	67.5	61.1	58.2	57.4	57.0	63.5	62.7	61.5	59.1	59.9	59.5	66.30
76.0	75.4	75.2	74.6	70.8	68.9	65.1	63.5	61.9	63.5	63.8	65.2	65.7	65.5	66.1	69.46
81.3	82.7	81.1	76.5	73.3	75.2	74.0	71.3	71.7	71.8	71.4	70.6	70.2	70.1	68.7	75.47
84.9	81.5	82.7	79.2	77.4	73.8	72.1	69.6	68.6	67.9	67.1	66.5	65.7	65.1	65.0	74.95
77.4	78.6	77.3	74.6	70.6	66.6	63.5	61.3	61.3	61.5	60.4	60.1	59.7	59.5	59.0	67.98
75.73	76.07	75.29	73.22	70.28	66.66	63.97	63.02	62.00	61.29	61.01	60.37	59.25	58.89	59.02	67.85
77.1	76.4	76.0	74.0	69.3	65.7	65.9	65.7	65.7	—	—	—	—	—	—	67.97
77.3	73.2	72.3	81.6	77.1	75.3	73.4	72.1	68.7	68.5	68.9	67.5	65.9	66.6	65.3	75.28
85.1	83.9	82.2	80.6	80.9	82.2	80.1	80.1	79.7	73.6	70.0	71.4	67.1	64.2	64.0	78.29
80.6	79.0	72.0	77.1	73.0	70.0	67.1	66.3	66.3	61.0	65.7	66.3	65.1	64.2	64.2	73.05
77.1	73.0	70.0	68.7	68.2	67.9	67.5	67.7	67.3	—	—	—	—	—	—	72.72
87.7	68.2	67.9	73.3	68.3	64.9	64.7	61.9	60.5	66.3	66.1	64.9	65.2	65.6	65.7	68.54
83.3	77.5	76.0	71.3	67.1	62.0	60.0	59.0	57.6	57.3	55.8	58.2	56.2	55.5	54.5	67.22
79.7	79.7	78.7	76.5	73.9	72.2	71.2	70.2	69.3	69.6	70.2	68.3	68.1	67.7	66.5	63.90
87.7	78.5	79.2	77.3	76.2	73.4	72.2	69.3	69.1	68.5	65.6	65.5	61.7	63.3	62.9	73.05
87.0	79.3	77.1	76.9	72.0	68.5	64.2	63.4	62.6	61.7	61.5	60.7	60.0	59.9	59.5	69.53
82.3	82.1	80.7	76.9	75.2	74.0	73.2	71.4	70.8	—	—	—	—	—	—	71.67
82.4	72.4	71.0	69.4	61.9	62.2	60.2	59.2	58.3	57.8	52.4	50.8	51.6	51.6	51.0	63.38
75.3	65.3	65.6	63.1	57.5	54.9	53.6	53.2	52.6	51.6	52.0	51.2	50.8	50.6	51.2	57.27
71.1	65.6	61.7	61.2	62.9	62.3	62.1	61.5	62.3	62.1	62.5	62.5	61.5	61.5	61.5	63.28
77.7	68.3	68.7	67.9	65.5	63.5	63.1	62.2	62.1	61.4	60.7	59.9	58.4	58.0	57.2	63.40
74.0	73.1	72.8	69.8	68.5	66.5	66.5	66.8	64.9	65.0	63.3	62.7	62.7	63.8	64.4	67.62
71.3	70.3	68.3	67.1	65.1	61.9	63.5	62.6	61.7	—	—	—	—	—	—	64.96
72.3	69.2	69.3	67.4	60.1	56.8	54.5	54.4	53.8	53.2	58.4	58.2	58.6	58.2	57.8	60.60
73.3	72.5	71.4	69.3	66.3	61.6	62.9	63.5	62.3	62.3	52.0	52.2	52.2	52.0	52.8	60.60
73.8	73.8	71.8	69.8	63.5	61.9	61.7	60.9	60.9	60.3	60.9	59.7	59.0	57.6	56.6	65.33
73.8	73.4	72.8	69.6	65.8	64.6	62.4	62.9	62.5	64.0	63.8	63.3	61.9	58.2	58.0	65.90
73.4	73.9	71.4	71.0	68.7	67.3	65.3	65.0	64.9	63.3	62.3	61.1	60.3	60.1	60.0	67.77
67.6	67.8	68.5	69.6	65.5	64.6	62.9	62.3	62.9	—	—	—	—	—	—	66.84
79.9	79.9	78.3	74.4	72.2	71.2	69.6	69.3	65.9	64.6	61.9	61.3	61.3	61.5	64.4	66.84
76.0	75.28	74.53	72.66	69.34	67.14	65.55	64.55	63.79	62.63	61.71	61.04	60.34	59.80	59.96	68.04

STANDARD THERMOMETER.												
Hours of Mean Gaiting Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.												
1	65.2	68.5	72.1	77.1	78.7	81.7	84.0	83.5	82.7	81.9	81.3	77.5
2	65.5	69.2	71.8	75.8	78.0	79.5	80.5	81.9	81.3	79.7	79.5	77.5
3	69.4	70.6	72.0	71.0	73.2	74.4	73.6	72.2	71.7	72.6	71.8	71.9
4	67.0	69.4	71.8	72.6	73.3	76.2	76.4	76.3	78.0	77.3	76.8	76.0
5	70.4	72.4	71.3	77.0	79.3	76.9	76.2	77.5	76.9	77.1	76.9	75.0
6	—	—	—	—	—	—	—	—	—	—	—	—
7	65.5	69.9	74.8	78.0	79.7	80.9	82.9	82.7	83.1	82.7	81.5	80.5
8	60.7	62.7	61.4	66.7	69.1	70.1	70.0	69.6	69.4	68.7	68.5	66.9
9	52.0	51.0	56.4	58.0	59.0	59.7	61.0	62.7	61.3	61.5	65.2	64.9
10	61.5	61.5	61.7	61.0	61.7	65.9	66.5	66.2	66.8	67.5	68.1	68.0
11	64.7	67.4	69.8	72.4	72.7	73.6	71.9	77.8	78.6	76.0	74.4	75.2
12	68.2	72.4	76.1	78.5	78.3	79.3	75.0	66.5	68.7	71.6	72.0	72.8
13	—	—	—	—	—	—	—	—	—	—	—	—
14	66.1	68.8	72.6	75.0	78.5	81.3	80.1	81.3	81.9	79.7	77.1	79.1
15	55.1	56.0	56.4	57.0	59.0	60.1	61.7	62.7	64.6	65.3	66.1	61.8
16	45.0	50.8	58.2	62.3	64.0	61.7	65.0	65.1	65.7	64.7	63.5	63.8
17	54.0	55.3	57.0	58.9	60.3	62.5	63.3	63.3	61.9	59.7	58.1	57.2
18	56.9	57.8	58.7	62.9	66.1	67.1	66.5	66.7	67.1	66.5	67.1	65.9
19	46.8	52.6	58.7	61.0	68.3	70.2	71.8	72.0	72.2	71.3	72.0	70.6
20	—	—	—	—	—	—	—	—	—	—	—	—
21	51.6	51.8	51.6	52.4	51.2	56.1	57.8	59.1	60.1	60.0	60.7	59.5
22	40.0	43.8	52.0	57.6	58.8	60.5	62.1	62.5	63.8	64.5	64.6	63.2
23	45.5	53.5	59.9	61.2	66.5	69.3	71.1	72.3	72.4	72.2	71.5	69.3
24	59.4	63.3	61.2	61.0	61.2	61.2	65.5	65.0	61.1	61.5	61.7	60.9
25	49.7	50.3	50.8	50.6	53.2	51.6	55.1	55.8	56.5	56.8	55.3	53.6
26	43.4	46.2	49.2	52.8	55.5	56.5	58.0	60.3	59.4	60.0	61.0	59.0
27	—	—	—	—	—	—	—	—	—	—	—	—
28	39.0	41.7	41.7	48.2	51.6	54.5	55.8	56.0	57.8	59.0	58.9	57.8
29	56.2	58.6	59.7	62.8	61.8	66.5	67.6	67.1	67.5	66.3	63.8	62.7
30	57.6	59.7	61.5	65.1	67.2	68.7	69.2	68.2	67.3	66.9	65.3	62.5
Hourly Means	56.78	59.55	62.32	61.96	66.85	68.27	68.91	69.01	69.26	69.00	68.57	67.32
OCTOBER.												
1	52.7	51.8	51.4	51.0	51.2	52.4	53.0	53.0	53.6	51.2	52.8	52.1
2	47.0	46.4	46.0	46.8	48.2	49.6	50.2	51.3	52.1	53.0	54.5	54.2
3	39.7	41.3	47.6	51.7	52.4	53.6	54.2	54.6	55.5	54.7	54.2	54.1
4	—	—	—	—	—	—	—	—	—	—	—	—
5	41.7	45.8	49.7	53.4	57.8	60.1	62.3	62.3	62.1	63.8	65.6	62.9
6	45.9	42.8	48.7	56.0	58.8	60.1	61.2	63.1	62.9	63.8	62.9	62.1
7	50.5	52.6	59.9	63.8	65.7	66.9	68.3	68.9	66.9	67.7	67.3	65.2
8	60.1	60.5	62.3	62.0	63.5	61.2	61.3	59.5	58.7	58.2	58.2	57.7
9	57.0	57.1	58.0	65.7	69.7	69.1	67.4	67.5	58.6	56.3	54.8	53.1
10	37.6	39.6	49.9	42.3	43.4	45.5	45.1	46.2	47.2	48.4	47.3	45.4
11	—	—	—	—	—	—	—	—	—	—	—	—
12	50.7	51.7	56.7	58.7	60.1	61.1	61.5	61.5	62.3	62.5	61.3	60.3
13	49.1	48.7	48.9	48.8	48.2	47.8	47.6	47.7	47.2	46.4	45.4	43.2
14	35.6	31.9	39.7	43.8	48.2	49.2	50.6	51.4	51.5	52.0	51.4	46.4
15	37.0	37.6	40.4	41.3	46.0	46.8	47.1	48.3	49.0	50.2	48.8	47.8
16	17.2	48.2	50.0	50.9	53.0	51.3	55.8	58.4	57.6	56.8	56.5	56.1
17	35.1	33.5	33.6	34.6	35.2	35.5	36.1	36.6	36.8	36.4	36.6	36.0
18	—	—	—	—	—	—	—	—	—	—	—	—
19	32.2	31.7	38.4	43.4	47.0	47.8	48.2	46.4	46.0	46.8	46.6	44.1
20	42.1	43.0	41.6	45.0	45.4	46.6	48.4	48.1	45.8	44.0	44.0	43.5
21	33.1	33.5	35.2	38.8	40.6	41.5	43.0	43.7	42.4	40.5	40.0	39.6
22	37.8	37.6	37.8	37.8	38.0	38.0	37.2	38.0	37.2	35.4	33.2	32.0
23	21.5	26.3	27.2	29.1	31.3	36.5	37.6	39.8	40.8	40.6	43.2	42.8
24	33.7	35.0	38.3	41.2	43.6	45.8	46.2	46.2	44.9	45.0	44.2	41.0
25	—	—	—	—	—	—	—	—	—	—	—	—
26	33.5	36.0	39.4	41.7	41.2	47.8	51.4	53.2	53.0	51.8	51.2	50.0
27	51.0	49.6	48.8	47.8	47.8	49.7	49.1	48.3	48.8	46.6	45.6	41.2
28	29.5	29.7	31.9	32.3	31.4	35.0	36.5	38.0	40.1	40.2	39.4	35.2
29	35.9	36.5	37.6	41.9	44.2	46.0	43.2	46.4	47.4	46.8	46.2	43.8
30	34.4	34.4	35.2	36.6	38.0	39.4	39.7	39.7	39.7	39.0	38.6	36.6
31	31.6	32.2	32.4	32.4	33.1	33.7	34.1	35.6	36.6	37.2	39.2	39.2
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	41.08	41.53	43.73	46.03	47.85	49.04	49.52	50.14	49.80	49.57	49.22	47.69

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
81.9	81.3	77.5	75.4	73.2	73.8	72.4	69.8	73.4	69.8	68.0	66.7	67.1	65.9	65.7	73.98
79.7	79.5	75.3	76.2	76.8	73.4	72.7	73.0	72.4	71.6	71.0	70.6	70.1	70.4	69.3	74.49
72.6	71.8	71.9	71.8	71.0	69.4	68.6	69.3	69.3	69.2	70.2	70.4	69.8	69.4	67.1	70.83
77.3	76.8	76.0	74.0	72.8	72.3	72.0	71.4	71.2	71.4	71.4	71.4	71.6	71.2	70.0	72.99
77.1	76.9	75.0	74.4	72.6	69.6	66.5	65.3	65.1	—	—	—	—	—	—	71.59
82.7	81.5	80.7	77.9	76.1	76.9	71.5	70.9	70.8	68.5	65.8	64.4	62.9	62.0	62.1	73.83
68.7	68.5	66.9	65.3	61.3	60.5	59.3	58.7	57.1	56.2	55.7	55.1	53.4	53.2	52.4	62.30
61.5	65.2	61.9	63.8	62.8	63.3	62.4	61.9	61.9	61.6	57.8	61.4	60.7	59.9	59.7	60.41
67.5	68.1	68.0	67.2	65.7	61.0	—	—	59.5	59.1	59.9	59.7	61.9	63.3	63.8	63.74
76.0	74.4	75.2	73.4	69.1	69.1	67.9	66.5	66.5	65.7	67.2	66.9	67.3	66.5	67.2	70.45
71.6	72.0	72.8	69.8	66.9	64.7	62.8	61.7	—	—	—	—	—	—	—	69.13
79.7	77.1	79.1	79.0	77.2	77.1	75.8	74.7	72.1	70.4	68.4	66.7	59.7	57.7	55.7	73.17
65.3	66.1	61.8	61.7	55.9	56.2	54.5	53.6	51.2	52.4	52.0	51.4	49.0	47.4	46.8	56.83
64.7	63.5	63.8	61.0	61.2	61.2	59.7	58.2	56.8	53.8	53.6	53.6	53.4	53.4	53.8	59.10
59.7	58.1	57.2	57.2	57.4	57.6	57.4	57.1	56.8	57.2	57.2	57.6	57.6	57.0	57.4	58.29
69.5	67.1	65.9	62.9	58.0	55.1	55.1	55.2	51.9	52.8	52.6	50.8	48.4	47.9	47.3	58.76
71.3	72.0	70.6	67.7	64.6	61.6	62.3	60.8	57.9	—	—	—	—	—	—	63.30
60.0	60.7	59.5	—	—	—	—	—	—	64.0	63.1	60.5	56.2	51.7	52.4	63.30
64.5	64.6	63.2	59.1	51.4	49.2	48.7	48.2	47.2	46.3	44.6	43.8	43.0	43.0	41.3	51.54
72.2	71.5	69.4	69.7	55.3	52.8	50.4	50.0	48.4	47.4	47.6	47.0	46.0	45.4	45.0	53.73
61.5	61.7	60.9	60.7	66.1	65.3	65.1	64.2	62.0	62.5	63.5	62.7	60.5	59.4	59.3	64.38
56.8	55.3	54.0	66.3	59.5	58.0	56.4	55.4	53.7	53.3	52.9	52.0	51.4	50.7	50.0	58.69
60.0	61.0	59.0	51.6	51.2	51.8	51.5	51.2	51.6	50.8	51.1	51.0	47.9	46.9	44.9	51.80
—	—	—	57.6	56.6	55.8	53.2	51.8	48.0	—	—	—	—	—	—	51.43
59.0	58.9	57.8	—	—	—	—	—	—	44.4	43.6	42.4	41.0	39.7	39.0	51.43
66.3	63.8	62.7	56.8	55.8	51.9	52.6	52.6	53.4	53.0	53.4	53.6	53.6	53.6	54.8	53.05
66.9	65.3	62.5	61.7	59.2	60.1	58.8	54.7	58.6	57.6	56.9	57.4	57.6	57.1	57.7	60.88
—	—	—	61.6	61.7	62.1	61.3	62.4	60.9	59.2	57.6	54.8	52.6	51.0	53.2	61.82
69.00	68.57	67.52	66.01	63.91	63.03	61.68	60.70	60.22	59.67	59.09	58.58	57.42	56.83	56.03	63.09
54.2	52.8	52.1	51.2	51.2	49.2	47.8	47.4	47.3	46.9	46.0	45.2	45.0	44.1	46.2	49.95
53.0	51.5	51.2	52.0	46.2	46.0	41.9	41.2	41.7	41.3	40.4	39.7	38.6	38.6	39.5	46.10
51.7	51.2	51.1	46.2	46.4	45.2	45.6	41.7	43.4	—	—	—	—	—	—	47.48
63.8	65.6	62.9	—	—	—	—	—	—	45.4	43.4	42.5	41.9	41.7	42.1	52.38
63.8	62.9	62.1	54.9	52.0	55.1	53.2	49.2	47.6	46.6	43.0	41.7	40.4	40.6	42.3	52.38
67.7	67.3	67.2	61.7	59.0	57.4	53.2	51.6	51.5	55.0	55.8	52.9	51.3	52.1	49.8	55.94
58.2	58.2	57.7	62.8	63.9	65.7	65.5	64.7	67.1	62.7	60.1	59.3	60.2	60.3	60.1	63.25
56.3	54.8	53.1	57.5	57.1	57.1	57.8	57.5	57.8	57.8	56.8	57.2	57.2	57.0	57.3	58.97
48.4	47.3	45.4	51.7	50.8	50.3	48.2	42.6	41.2	41.2	40.9	40.4	39.7	38.8	39.3	52.50
—	—	—	40.4	37.7	38.0	37.9	38.4	36.6	—	—	—	—	—	—	41.18
62.5	61.3	60.3	61.1	59.5	51.5	52.8	52.0	51.8	51.6	51.0	51.2	51.2	50.0	48.4	41.18
46.4	45.4	43.2	43.6	43.2	43.2	41.0	43.1	42.4	41.6	41.3	39.6	39.3	38.6	38.2	56.35
52.0	51.4	49.4	42.0	41.7	41.5	41.2	43.7	53.4	43.0	44.0	43.2	42.6	39.7	38.0	44.81
50.2	48.8	47.8	41.8	41.1	40.8	41.3	41.9	42.6	43.0	43.2	43.0	44.7	46.6	47.2	44.12
56.8	56.5	56.4	55.8	55.1	53.4	50.0	46.0	44.9	44.6	41.8	40.1	39.2	38.3	36.2	49.62
36.4	36.6	36.0	35.6	33.9	32.7	31.7	31.0	31.2	—	—	—	—	—	—	49.62
46.8	46.6	44.1	—	—	—	—	—	—	36.3	35.4	35.0	35.1	34.9	34.9	34.74
44.0	44.0	43.5	43.1	42.1	42.1	41.8	41.5	42.7	43.0	42.7	42.0	41.6	42.2	41.7	42.71
40.5	40.0	39.6	42.2	39.5	38.6	36.8	35.5	33.0	32.3	33.5	32.7	32.2	31.0	32.7	40.02
35.4	33.2	32.0	38.8	38.0	35.4	36.0	37.0	36.8	36.4	36.8	37.2	38.0	38.0	38.0	38.20
40.6	43.2	42.8	31.2	30.6	29.2	27.8	25.5	22.7	22.3	21.9	20.8	20.6	22.5	23.8	30.79
45.0	44.2	41.0	42.1	41.2	39.4	38.4	38.2	36.4	36.8	36.0	36.0	35.7	34.9	32.9	36.28
—	—	—	40.1	38.4	37.2	34.1	33.0	31.6	—	—	—	—	—	—	38.47
51.8	51.2	50.0	—	—	—	—	—	—	33.6	32.7	31.2	34.1	33.2	32.9	38.47
46.6	45.6	44.2	53.2	53.1	53.0	53.4	52.2	51.8	53.3	51.4	51.4	51.0	51.6	51.6	49.18
40.2	39.1	35.2	43.2	42.2	41.2	39.7	39.5	38.2	36.6	35.5	34.7	34.5	34.3	31.4	42.85
39.0	38.6	36.6	31.6	29.0	28.8	29.7	31.6	31.4	29.0	32.2	33.5	33.5	32.9	33.9	33.30
37.2	39.2	39.2	41.3	39.8	39.5	38.4	38.0	37.4	36.8	36.1	35.6	35.3	35.0	34.8	40.16
—	—	—	36.2	35.6	35.4	35.1	34.4	33.5	32.9	31.6	31.2	31.5	31.2	31.6	35.48
—	—	—	39.4	40.0	41.0	40.1	40.3	40.3	—	—	—	—	—	—	39.45
49.57	49.22	47.69	—	—	—	—	—	—	47.2	47.4	47.6	48.6	49.0	48.6	—
45.95	44.83	44.22	43.20	42.30	42.20	42.20	42.90	41.93	41.48	40.88	41.13	40.91	44.88	—	—

STANDARD THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
NOVEMBER.	2	48°6	48°4	47°8	50°3	51°2	51°8	52°2	52°1	52°7	53°0	53°3	53°0
	3	46°6	46°8	47°6	49°1	50°2	52°7	53°1	52°2	52°4	52°2	52°1	49°0
	4	42°0	42°2	45°0	49°1	50°9	51°4	52°0	52°2	52°8	53°0	51°2	45°0
	5	36°9	37°4	40°5	43°8	47°2	49°2	50°0	49°6	48°8	49°4	47°6	43°5
	6	30°6	32°2	36°2	39°8	41°7	47°8	49°0	50°0	50°2	50°4	49°3	46°1
	7	39°0	40°7	41°9	43°6	45°8	48°3	49°7	48°9	49°7	49°7	49°3	49°0
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	49°7	49°6	50°4	51°0	53°4	53°1	51°1	51°2	53°9	53°5	53°9	52°8
	10	49°8	49°6	50°4	51°2	53°0	54°1	55°5	55°5	55°3	53°8	53°0	52°0
	11	50°9	51°1	51°2	51°2	51°6	52°0	51°6	51°8	51°6	52°6	52°6	52°0
	12	45°4	45°2	45°2	46°0	46°6	47°6	47°8	48°5	48°6	48°0	47°8	47°2
	13	46°0	46°2	46°2	46°2	46°5	46°4	46°0	46°1	46°8	46°8	46°8	46°1
	14	44°2	43°5	42°7	43°6	44°4	43°8	44°6	46°0	45°6	45°9	45°2	44°1
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	42°8	43°9	43°7	44°7	46°4	47°8	48°0	47°8	47°3	46°4	45°6	45°6
	17	39°6	41°3	43°6	45°0	47°0	46°2	47°0	49°2	48°0	47°6	47°4	47°0
	18	43°6	42°8	45°0	48°8	52°0	51°0	52°8	52°8	51°3	50°4	48°1	47°0
	19	41°9	41°6	41°2	40°4	40°7	41°5	41°5	41°2	41°0	41°4	40°5	38°5
	20	37°0	37°2	37°2	37°3	39°7	40°4	41°7	42°4	43°2	42°4	41°4	39°4
	21	37°4	36°8	37°4	38°1	38°5	39°9	40°6	41°0	42°1	43°0	42°1	42°1
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	30°3	30°0	30°2	31°6	33°3	33°9	34°7	36°0	37°4	36°8	36°2	35°2
	24	31°1	32°7	33°5	34°9	38°2	40°6	41°7	43°2	40°5	40°0	38°6	34°6
	25	25°3	22°1	20°2	20°2	19°8	20°1	20°8	21°3	21°6	21°1	21°7	21°1
	26	19°4	19°5	20°9	22°7	24°6	27°4	27°6	28°2	29°0	27°8	26°3	24°8
	27	24°2	22°5	22°9	24°4	25°8	26°9	28°1	30°0	31°4	32°9	33°7	34°7
	28	37°2	36°8	38°2	37°9	38°4	40°1	41°7	42°8	43°5	42°4	40°2	39°0
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	27°4	25°5	25°7	26°7	28°2	29°0	29°2	29°0	29°2	28°1	28°5	27°1
	Hourly Means	38°80	38°62	39°39	40°72	42°34	43°48	44°06	44°49	44°57	44°36	43°71	42°44
DECEMBER.	1	13°9	13°0	15°6	19°1	20°8	23°2	24°9	26°7	27°4	27°6	28°1	28°9
	2	34°5	35°0	35°7	36°6	37°5	38°5	39°5	41°3	43°6	42°3	42°1	43°6
	3	34°4	34°1	33°5	33°4	34°0	34°3	34°2	33°1	33°5	32°7	31°6	31°1
	4	25°8	25°9	27°0	29°9	31°8	32°5	33°7	34°3	33°7	34°6	34°6	34°7
	5	29°9	29°5	29°5	30°8	32°4	33°5	34°3	34°7	34°3	34°3	33°5	33°3
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	34°3	34°9	35°5	37°0	37°4	38°1	38°6	39°1	39°0	38°9	39°4	40°1
	8	37°8	38°0	36°1	36°5	37°2	37°5	36°6	37°4	37°1	37°4	36°2	34°7
	9	32°5	32°4	31°9	31°4	31°4	31°7	32°3	32°8	33°0	32°9	32°9	33°1
	10	32°4	32°4	32°4	30°3	29°9	30°7	31°2	32°0	32°3	32°4	31°8	31°0
	11	25°5	24°4	23°6	24°0	25°8	27°6	28°1	28°5	28°9	29°3	29°5	29°2
	12	20°0	17°3	17°1	16°7	16°0	17°2	18°0	18°1	19°8	20°6	21°0	21°4
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	16°2	16°3	17°0	16°6	16°9	18°2	20°2	22°1	23°2	24°9	24°1	20°6
	15	7°7	7°1	9°0	12°4	17°8	20°0	23°4	25°3	26°5	27°2	25°9	24°9
	16	12°8	13°0	14°3	18°8	22°1	26°7	27°6	28°2	27°6	27°1	26°1	23°2
	17	22°3	22°5	23°2	24°8	26°1	26°3	27°4	26°5	27°1	27°8	26°9	24°1
	18	12°8	12°6	12°1	16°0	19°2	22°7	25°6	28°5	30°6	29°8	28°8	29°0
	19	29°5	29°5	29°0	28°8	29°8	31°2	32°3	33°5	34°8	32°9	32°3	31°5
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	22°1	20°8	18°9	19°6	21°2	23°2	24°9	26°5	27°9	27°6	26°3	24°1
	22	22°1	20°6	20°4	21°5	22°3	22°5	24°2	24°2	26°1	26°1	25°5	24°9
	23	7°1	3°7	4°5	9°2	11°8	18°2	20°5	22°1	23°6	23°8	23°9	15°8
	24	27°5	28°1	28°8	29°9	31°2	33°9	34°1	33°9	34°4	34°6	34°7	35°3
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	16°6	16°6	16°7	18°8	22°9	26°7	29°7	30°3	31°2	32°9	31°2	33°0
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	35°2	34°9	35°2	34°9	36°0	34°3	34°7	32°9	31°2	31°3	31°0	30°2
	29	19°4	19°0	20°2	22°3	26°1	27°4	27°6	27°8	28°1	28°6	28°5	29°1
	30	36°6	37°0	36°8	37°5	37°8	39°1	38°9	40°3	39°6	38°7	37°6	36°8
	31	34°1	34°3	35°3	37°4	38°6	39°1	39°1	40°0	40°5	40°3	39°4	38°6
Hourly Means	24°73	24°34	24°59	25°93	27°58	29°01	29°95	30°78	31°24	31°29	30°77	29°76	

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
53.0	53.3	53.0	52.7	52.0	52.2	51.8	50.6	50.4	49.2	49.4	46.0	42.6	43.6	44.9	49.99
52.2	52.1	49.0	49.0	48.8	48.8	49.2	49.2	47.4	43.4	42.1	40.6	41.7	41.2	42.0	47.81
53.0	51.2	48.0	45.4	43.6	42.6	41.3	40.8	40.4	40.2	39.4	38.7	38.8	38.0	37.6	41.87
49.4	47.6	43.6	38.6	35.6	35.8	36.1	34.1	32.7	30.9	31.8	31.6	31.3	30.5	32.4	39.40
50.4	49.3	46.4	41.8	42.0	39.2	37.7	37.0	37.5	37.5	36.0	38.4	37.6	37.6	38.2	41.25
49.7	49.3	49.0	50.2	50.1	50.9	50.6	50.0	50.0	—	—	—	—	—	—	—
53.5	53.9	52.8	52.8	52.4	52.2	52.3	52.2	51.8	49.0	49.2	49.4	49.7	49.7	50.2	48.11
53.8	53.0	52.0	51.8	52.0	52.0	52.6	52.8	52.6	51.6	51.0	51.0	50.8	50.3	50.0	52.02
52.6	52.6	52.0	51.0	50.8	50.4	49.0	48.0	47.2	52.3	51.6	51.4	51.0	50.4	50.8	52.28
48.0	47.8	47.2	47.0	47.1	46.9	46.6	46.6	46.0	47.1	46.9	47.2	47.0	47.0	46.4	49.93
46.8	46.8	46.4	46.4	46.6	46.6	46.4	46.0	45.2	45.8	46.2	46.2	46.2	46.3	46.1	46.70
45.9	45.2	44.4	44.7	46.0	46.6	47.2	47.0	46.6	44.9	45.2	44.9	44.7	44.6	44.7	45.95
46.4	45.6	45.6	45.2	45.0	44.7	44.6	44.6	44.4	44.0	44.0	43.6	42.1	42.2	42.7	44.61
47.6	47.4	47.0	46.2	46.6	46.4	47.2	47.7	48.1	45.4	43.4	42.4	41.2	41.5	41.5	44.64
50.4	48.4	47.0	44.5	44.6	44.3	43.9	43.6	42.9	47.5	46.8	46.1	46.4	45.8	44.3	46.14
44.4	40.5	38.6	38.6	38.6	39.7	38.0	38.2	36.8	42.9	42.4	42.4	42.1	42.1	41.9	46.14
42.4	41.4	40.4	38.8	38.2	37.6	36.8	35.6	34.7	36.6	35.8	36.6	36.6	36.4	36.2	39.20
43.0	42.1	42.1	42.0	42.2	41.6	45.0	45.1	44.0	34.7	34.7	35.4	36.8	38.0	37.4	38.21
39.8	36.2	35.2	35.2	34.7	34.9	34.9	34.7	36.1	31.7	31.8	31.1	31.3	31.5	29.8	38.74
40.0	38.6	34.6	34.1	32.4	32.1	31.6	31.0	30.6	36.5	37.6	37.6	36.0	35.6	35.2	34.77
21.4	21.7	21.1	20.7	20.2	18.7	18.8	18.6	18.2	30.6	29.5	28.8	27.4	26.1	25.9	33.86
27.8	26.3	24.8	24.6	25.3	25.7	25.5	25.3	26.9	18.2	18.4	19.0	20.6	20.7	19.4	20.31
32.9	33.7	34.7	34.6	36.0	35.1	35.1	34.1	34.9	26.9	26.9	26.7	26.1	26.1	24.8	25.38
42.1	40.2	39.0	38.6	37.8	38.0	35.8	34.1	33.0	35.6	35.5	35.2	35.3	36.6	37.2	31.85
28.4	28.5	27.1	24.8	23.4	22.7	20.5	19.4	19.0	30.9	29.7	29.1	29.6	29.5	30.3	36.45
41.36	43.71	42.41	41.79	41.28	41.15	40.74	40.28	39.90	38.71	38.72	38.20	37.91	37.86	37.72	40.87
27.6	28.1	28.9	28.9	30.3	31.2	32.2	32.2	32.7	32.7	33.1	33.5	32.9	33.1	33.5	27.31
42.3	42.1	40.6	43.0	45.2	45.0	43.6	43.8	49.2	48.9	49.2	44.5	37.8	37.0	35.2	41.07
32.7	31.6	31.4	31.0	30.3	30.1	28.5	26.9	25.9	25.3	25.6	25.7	25.7	25.8	25.8	30.20
34.6	34.6	34.1	34.5	34.5	33.3	32.3	32.5	32.2	32.0	31.8	31.9	32.0	30.9	29.9	31.92
34.3	33.5	33.3	32.0	31.4	31.0	31.0	30.4	30.2	—	—	—	—	—	—	—
38.9	39.1	40.1	40.3	40.4	39.6	39.1	39.4	39.7	32.2	32.7	32.7	32.7	33.5	33.5	32.20
37.1	36.2	34.7	33.9	34.1	33.9	33.5	33.3	33.1	30.8	30.8	30.6	30.2	37.8	37.8	38.46
32.9	32.9	33.1	32.7	31.6	31.2	31.2	31.0	31.0	33.3	33.1	31.9	31.2	31.6	32.8	34.94
32.4	31.8	31.0	31.0	29.9	28.4	27.5	27.0	27.6	30.7	30.3	30.0	30.0	29.5	28.4	31.49
29.3	29.5	29.2	29.7	29.5	29.5	29.2	29.2	28.1	27.5	27.4	27.1	27.1	27.2	26.3	29.69
20.6	21.0	21.4	21.3	21.7	20.2	19.1	17.5	17.1	26.5	24.5	24.5	20.4	19.6	18.4	19.0
21.9	21.4	20.6	19.1	18.4	16.6	15.5	13.2	10.5	15.6	15.8	15.4	15.6	15.4	16.2	18.11
27.2	25.9	24.9	17.7	15.6	13.4	12.0	11.4	10.7	10.5	12.0	12.2	12.7	9.0	9.3	16.25
27.1	26.1	23.2	22.9	24.6	27.8	23.7	23.9	22.1	10.5	9.6	10.5	12.1	11.6	11.6	15.49
27.8	26.9	24.1	22.9	21.7	18.8	19.8	19.6	18.2	22.1	22.1	22.7	22.8	23.5	22.5	22.84
29.8	28.8	29.0	29.0	28.1	27.4	30.1	29.5	30.8	16.2	16.4	15.6	15.4	15.2	14.8	21.31
32.9	32.3	31.5	31.2	30.8	30.1	29.5	29.7	29.5	30.6	30.4	30.4	30.1	29.5	29.6	25.97
27.6	26.3	24.1	—	—	—	—	—	—	—	—	—	—	—	—	—
26.1	25.5	24.9	16.4	15.0	14.8	15.2	15.3	18.9	24.5	23.6	22.8	23.6	23.6	22.4	28.96
23.8	23.9	15.8	20.4	19.4	22.1	22.9	23.0	22.6	20.4	21.7	22.9	24.4	26.5	26.0	21.63
34.6	34.7	35.3	13.7	17.6	16.7	19.5	16.2	12.6	16.4	13.7	8.6	13.7	11.2	8.4	20.27
32.9	31.2	33.0	35.3	36.0	35.9	35.4	35.6	36.2	—	—	—	—	—	—	—
31.3	31.0	30.2	33.5	33.7	34.1	34.3	35.3	36.0	21.7	21.5	21.5	21.2	20.2	16.9	30.16
28.6	28.5	29.1	—	—	—	—	—	—	41.1	39.5	39.4	38.7	38.8	36.1	31.13
38.7	37.6	36.8	29.5	29.3	27.4	26.1	25.7	25.3	26.8	23.4	21.9	22.5	21.7	20.8	29.10
40.3	39.4	38.6	28.4	30.7	30.8	31.8	32.4	32.9	33.1	33.1	33.1	31.9	35.4	36.0	29.03
31.29	30.77	29.76	36.4	36.2	35.8	35.0	34.7	34.9	34.7	35.4	35.8	34.4	34.1	34.5	36.61
—	—	—	38.2	38.2	37.4	37.6	37.0	36.9	37.2	37.0	37.3	36.6	36.7	36.8	37.65
28.91	28.81	28.55	28.32	27.98	27.88	27.25	26.65	26.14	26.19	26.19	25.91	25.62	25.62	27.84	—



STANDARD THERMOMETER.													
Hours of Mean Gettingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	1	36°7	36°7	36°2	35°9	35°7	35°8	35°9	35°7	34°9	34°8	33°8	33°4
	2	36°1	35°5	35°7	35°4	36°7	36°7	37°4	37°3	36°8	36°0	35°5	35°3
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	34°0	34°5	34°6	34°9	35°3	36°5	34°8	34°3	34°8	34°8	34°9	35°4
	5	37°1	36°5	36°8	35°7	36°3	37°5	37°9	38°3	37°6	35°9	35°3	35°3
	6	30°4	30°7	30°9	32°2	33°4	34°4	34°2	33°8	33°2	33°2	33°0	32°1
	7	29°3	28°1	27°6	26°8	26°2	25°8	25°6	23°7	23°5	25°1	23°9	22°0
	8	10°2	8°3	7°5	7°5	8°1	9°1	9°6	10°8	10°8	11°0	10°4	10°0
	9	11°4	11°4	11°4	12°7	14°1	15°2	17°4	19°8	20°2	19°3	18°5	18°2
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	2°1	1°4	1°0	6°1	10°9	11°7	12°0	12°6	13°8	14°8	14°5	13°8
	12	12°9	13°0	13°8	14°6	16°0	17°2	17°6	18°1	18°7	18°3	17°4	15°5
	13	24°9	25°4	26°2	27°5	30°7	31°1	32°1	31°2	35°0	34°7	33°9	33°0
	14	35°5	35°7	36°1	36°1	36°6	37°1	38°5	40°2	39°6	39°4	38°7	37°8
	15	36°9	36°9	37°1	38°3	38°6	39°0	40°4	42°0	41°8	40°7	39°6	40°2
	16	36°1	35°5	33°8	33°0	32°7	32°7	33°7	30°3	28°3	24°7	22°3	18°5
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	31°1	32°5	32°7	33°1	34°0	35°3	35°2	35°2	35°2	34°2	33°4	32°3
	19	10°8	9°2	9°3	8°9	10°4	11°0	11°4	10°8	11°4	10°6	9°6	8°2
	20	6°2	6°0	7°1	9°8	14°4	18°3	20°1	20°8	21°4	21°5	21°3	20°0
	21	14°0	13°5	12°9	13°3	13°8	13°3	9°8	9°8	8°7	6°5	5°9	4°6
	22	7°5	7°1	6°5	8°5	8°5	11°3	11°3	13°8	14°2	14°1	14°6	15°3
	23	22°5	23°3	24°8	27°7	30°1	32°5	32°5	32°8	33°0	33°0	33°4	30°2
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	18°1	18°1	18°3	21°3	21°5	25°4	25°8	25°6	25°8	25°8	25°8	25°1
	26	25°9	29°3	32°8	33°2	33°8	34°4	34°6	32°5	28°6	26°8	26°6	26°5
	27	12°5	12°7	13°3	15°1	15°7	15°7	15°5	15°9	15°8	15°6	14°4	12°2
	28	3°8	4°8	4°9	8°6	12°3	16°7	19°3	20°4	21°4	22°5	21°8	20°3
	29	21°4	23°3	24°3	25°6	27°5	29°1	30°9	32°5	33°2	30°9	29°3	28°5
	30	22°2	21°9	19°2	19°3	19°3	17°8	18°1	17°8	17°8	16°7	15°7	14°0
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	21°75	21°97	22°11	23°12	24°15	25°41	25°83	26°12	25°98	25°42	24°75	23°76	
FEBRUARY.	1	23°8	24°6	25°1	25°9	24°1	30°5	32°1	32°8	32°4	32°8	32°6	31°7
	2	28°6	28°8	31°3	34°8	38°9	39°2	39°7	40°2	40°6	39°9	39°2	39°1
	3	37°9	37°9	37°9	37°6	37°5	37°4	37°6	37°9	35°7	32°4	29°3	26°3
	4	12°2	12°4	12°2	13°2	15°1	17°2	19°3	22°4	23°6	24°2	23°0	21°8
	5	10°6	9°6	8°9	12°1	13°7	15°6	17°9	19°3	21°5	21°7	22°0	21°7
	6	13°7	12°4	13°9	16°0	17°8	20°1	23°0	25°7	27°3	28°3	28°5	27°7
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	29°0	28°6	29°0	30°5	32°4	34°3	34°7	35°7	35°2	35°7	35°3	32°3
	9	29°0	27°3	27°1	29°5	30°7	32°2	32°3	32°6	32°3	31°8	32°0	31°1
	10	26°9	27°0	26°7	28°5	29°8	31°8	32°4	35°3	34°8	33°8	32°1	29°4
	11	16°7	17°0	16°3	17°8	20°7	21°3	21°6	22°2	21°7	21°6	21°3	19°7
	12	13°3	14°9	14°3	17°0	20°9	23°2	23°8	25°1	27°1	24°3	22°5	20°4
	13	16°0	15°8	16°0	17°9	21°4	23°6	24°5	24°9	25°7	25°7	25°6	25°3
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	29°8	29°0	27°8	26°8	27°4	26°5	24°7	24°0	23°0	23°1	22°8	21°3
	16	17°8	12°2	17°0	17°8	13°1	13°4	14°0	21°8	23°4	24°7	23°8	20°7
	17	21°0	21°0	21°3	24°9	29°2	31°3	30°2	30°9	31°1	32°3	32°3	30°5
	18	22°0	22°2	24°2	26°2	30°2	32°3	33°2	31°6	33°5	33°1	32°5	31°7
	19	28°1	27°6	27°5	27°1	27°9	29°8	30°9	30°9	32°3	32°7	32°3	31°3
	20	26°7	26°2	25°5	24°0	23°0	22°8	23°6	23°2	22°8	23°0	22°4	22°2
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	15°8	15°8	15°9	16°6	17°8	20°2	19°7	20°7	20°5	20°9	20°9	20°7
	23	4°3	3°2	4°6	7°2	9°7	11°7	14°3	15°7	17°4	17°9	18°7	16°8
	24	3°6	2°8	7°4	10°0	15°4	19°7	21°8	22°8	23°0	23°2	22°2	21°8
	25	18°3	17°8	18°1	21°1	23°4	24°9	25°9	26°2	26°6	26°5	26°0	24°6
	26	9°1	10°3	17°3	21°8	26°9	27°8	27°5	27°7	27°1	26°3	25°9	25°7
	27	26°9	27°1	28°5	27°6	28°3	29°4	29°8	30°4	31°1	31°2	32°2	32°5
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	20°05	19°65	20°62	22°16	24°14	25°68	26°44	27°63	27°90	27°80	27°31	26°10	

STANDARD THERMOMETER.

9	10	11
3	4	5
33.8	33.4	33.4
35.0	35.3	35.3
34.8	34.9	35.4
35.9	35.3	35.3
33.2	33.0	32.1
35.1	23.9	22.0
1.0	10.4	10.0
9.3	18.5	18.2
4.8	14.5	13.8
8.3	17.4	15.5
11.7	33.9	33.0
39.4	38.7	37.8
40.7	39.6	40.2
41.7	22.3	18.5
41.2	33.4	32.3
10.6	9.6	8.2
21.5	21.3	20.0
6.5	5.9	4.6
4.1	14.6	15.3
33.0	33.4	30.2
25.8	25.8	25.1
26.8	26.6	26.5
15.6	14.4	12.2
22.5	21.8	20.3
40.9	29.3	28.5
16.7	15.7	14.0
25.12	21.75	23.76
32.8	32.6	31.7
39.9	39.2	39.1
32.4	29.3	26.3
24.2	23.0	21.8
11.7	22.0	21.7
8.3	28.5	27.7
5.7	35.3	32.3
1.8	32.0	31.1
3.8	32.1	29.4
1.6	21.3	19.7
4.3	22.5	20.1
5.7	25.6	25.3
3.1	22.8	21.3
4.7	23.8	20.7
2.3	32.3	30.5
3.1	32.5	31.7
2.7	32.3	31.3
3.0	22.4	22.2
0.9	20.9	20.7
1.9	18.7	16.8
3.2	22.2	21.8
3.5	26.0	24.6
3.3	25.9	25.7
1.2	32.2	32.5
27.80	27.31	26.10

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
32.8	32.5	32.8	32.5	32.9	34.1	35.0	34.8	36.3	36.3	36.2	36.1	34.91
35.4	35.4	34.9	35.1	35.1	35.1	—	—	—	—	—	—	34.33
35.4	37.1	36.7	38.5	39.8	42.2	41.6	40.6	38.9	38.6	37.4	37.3	36.79
35.7	35.9	36.1	35.5	35.5	35.5	34.2	33.0	33.0	30.2	30.2	30.3	35.22
31.7	31.5	31.1	30.7	30.4	30.2	29.8	29.6	29.8	29.9	30.1	30.0	31.51
19.1	17.4	16.4	15.9	16.8	14.4	14.8	13.8	12.9	15.1	14.9	12.9	20.50
10.3	10.3	10.2	9.5	8.3	8.4	9.3	9.9	10.2	10.4	10.8	10.8	9.65
18.1	18.0	18.1	17.4	17.2	17.0	—	—	—	—	—	—	12.88
—	—	—	—	—	—	7.5	5.0	2.4	0.0	0.0	1.2	—
13.1	12.5	11.7	11.7	11.9	11.8	—	—	12.1	12.2	12.3	12.5	10.61
13.1	13.5	14.2	15.1	15.5	15.1	13.5	20.7	22.0	20.8	23.3	24.2	16.84
32.3	32.4	31.9	32.7	32.5	33.3	35.1	35.8	35.7	36.1	35.9	35.9	32.43
37.1	36.4	35.7	36.1	36.3	36.3	34.7	35.3	35.3	35.7	36.7	37.0	36.83
41.1	41.1	42.7	42.2	42.2	42.7	41.6	41.2	40.1	38.6	37.8	36.1	39.95
16.1	14.2	13.3	12.9	12.3	12.0	—	—	—	—	—	—	24.78
—	—	—	—	—	—	22.2	23.3	24.7	26.4	27.0	28.7	—
30.7	30.0	29.1	28.1	26.8	24.9	24.5	22.3	20.1	17.4	14.4	13.8	28.62
7.8	7.1	6.9	7.4	7.4	7.3	7.3	7.2	6.8	6.8	6.8	6.5	8.62
19.4	18.9	18.1	16.9	16.9	15.3	14.4	13.5	14.5	14.0	14.4	14.2	15.73
3.8	2.5	3.9	5.8	5.6	5.4	5.4	5.6	6.0	6.2	6.9	6.9	7.92
14.6	13.5	15.1	16.1	18.9	19.6	20.5	20.5	20.1	19.9	20.7	22.2	14.77
28.9	22	25.1	23.3	21.9	22.4	—	—	—	—	—	—	25.28
25.1	25.1	26.0	26.8	26.8	26.1	24.8	24.4	27.2	28.1	26.9	25.5	24.68
26.4	24.2	23.5	22.2	22.0	22.2	22.2	18.9	17.2	17.0	15.3	14.0	25.42
10.4	8.3	6.8	6.0	5.2	5.0	4.8	4.0	3.0	2.1	2.6	3.8	9.85
19.9	18.1	18.3	17.4	16.1	19.9	17.6	19.1	19.5	20.0	19.7	20.5	16.79
28.4	28.3	27.0	26.3	25.6	24.4	23.0	22.2	22.7	23.8	23.8	23.3	26.47
12.1	11.0	10.6	10.6	10.3	10.1	—	—	—	—	—	—	17.57
—	—	—	—	—	—	24.3	23.0	23.0	22.3	22.1	22.4	—
23.03	22.36	22.16	22.03	21.93	21.95	21.98	21.44	21.58	21.44	21.44	21.29	23.06
31.7	31.3	32.1	31.9	31.2	30.9	31.3	29.4	28.3	30.4	30.5	29.0	30.02
40.0	40.4	39.9	39.1	37.9	37.3	38.1	37.9	38.3	38.6	37.5	36.9	37.59
25.6	21.7	19.9	18.7	17.1	16.6	16.6	16.7	15.2	14.1	13.8	12.6	26.36
20.3	19.1	17.8	16.8	16.2	16.0	15.4	14.5	14.1	13.6	13.0	11.6	16.88
21.7	22.2	21.1	20.7	19.8	18.4	18.1	18.0	16.2	15.8	14.1	13.4	17.30
21.7	22.4	22.2	21.7	20.9	20.9	—	—	—	—	—	—	22.60
31.7	31.7	31.1	32.1	32.4	32.8	32.4	32.2	31.9	31.1	31.2	30.2	32.23
30.2	29.6	29.4	29.6	29.6	28.2	29.4	25.1	23.0	21.5	24.4	26.0	28.91
28.8	26.9	26.3	24.2	20.3	17.1	15.6	12.8	11.7	15.0	15.5	15.8	24.95
18.7	17.9	17.4	16.4	17.5	17.5	17.1	17.0	17.0	16.1	14.4	12.4	18.22
19.3	18.6	18.1	16.7	15.9	10.6	11.6	13.7	14.9	16.8	17.9	16.6	18.23
25.1	24.0	23.9	23.2	23.0	23.0	—	—	—	—	—	—	24.30
20.5	20.7	20.3	19.5	18.1	17.0	16.8	17.9	19.1	19.7	18.9	18.7	22.23
21.5	22.4	22.2	23.5	20.3	19.1	19.3	20.1	19.8	19.8	20.0	19.9	19.48
29.4	27.1	25.7	22.7	20.5	19.6	16.9	16.0	16.6	16.6	19.6	21.0	24.49
29.8	30.0	29.1	28.5	28.1	28.1	28.1	28.5	28.6	28.6	28.1	27.9	29.13
30.9	30.8	30.5	30.5	30.2	29.8	29.2	29.2	29.0	28.5	28.1	27.3	29.68
22.2	22.2	22.0	21.8	21.5	21.7	—	—	—	—	—	—	21.62
20.6	19.5	17.6	15.6	11.7	10.6	9.9	8.7	8.2	7.0	6.5	7.9	15.39
10.8	6.0	4.2	6.4	7.8	5.2	1.6	4.6	5.2	5.4	4.6	4.0	8.64
21.1	21.2	22.3	21.1	21.4	21.3	21.7	20.9	20.1	20.1	20.1	19.6	18.53
21.4	15.0	12.6	13.7	13.0	12.8	13.0	12.1	9.9	9.1	9.1	10.8	18.00
26.1	26.5	26.9	28.2	28.5	28.3	28.5	28.5	28.2	28.1	28.1	28.1	25.31
33.1	33.1	33.1	33.1	32.1	31.1	—	—	—	—	—	—	28.08
—	—	—	—	—	—	20.3	20.5	21.3	21.1	20.6	19.6	—
25.13	24.18	23.57	23.15	22.30	21.43	20.81	20.72	20.43	20.49	20.42	20.06	23.26

STANDARD THERMOMETER.												
Hours of Mean Gottgen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
MARCH.	1	20 <sup>o</sup> 1	20 <sup>o</sup> 3	22 <sup>o</sup> 2	21 <sup>o</sup> 2	21 <sup>o</sup> 9	26 <sup>o</sup> 4	27 <sup>o</sup> 8	28 <sup>o</sup> 9	29 <sup>o</sup> 6	29 <sup>o</sup> 6	28 <sup>o</sup> 9
	2	19 <sup>o</sup> 2	18 <sup>o</sup> 4	21 <sup>o</sup> 2	21 <sup>o</sup> 0	24 <sup>o</sup> 6	26 <sup>o</sup> 0	28 <sup>o</sup> 7	30 <sup>o</sup> 7	30 <sup>o</sup> 9	30 <sup>o</sup> 2	29 <sup>o</sup> 2
	3	23 <sup>o</sup> 0	27 <sup>o</sup> 0	27 <sup>o</sup> 8	29 <sup>o</sup> 3	31 <sup>o</sup> 4	33 <sup>o</sup> 8	31 <sup>o</sup> 8	34 <sup>o</sup> 0	35 <sup>o</sup> 8	36 <sup>o</sup> 0	36 <sup>o</sup> 0
	4	13 <sup>o</sup> 9	14 <sup>o</sup> 2	21 <sup>o</sup> 3	25 <sup>o</sup> 7	27 <sup>o</sup> 5	29 <sup>o</sup> 0	30 <sup>o</sup> 8	32 <sup>o</sup> 0	33 <sup>o</sup> 0	33 <sup>o</sup> 3	32 <sup>o</sup> 2
	5	12 <sup>o</sup> 2	9 <sup>o</sup> 8	12 <sup>o</sup> 8	18 <sup>o</sup> 8	25 <sup>o</sup> 2	28 <sup>o</sup> 4	28 <sup>o</sup> 9	29 <sup>o</sup> 9	31 <sup>o</sup> 0	30 <sup>o</sup> 5	30 <sup>o</sup> 5
	6	28 <sup>o</sup> 8	29 <sup>o</sup> 4	31 <sup>o</sup> 9	31 <sup>o</sup> 0	31 <sup>o</sup> 5	36 <sup>o</sup> 5	35 <sup>o</sup> 7	35 <sup>o</sup> 6	35 <sup>o</sup> 5	35 <sup>o</sup> 4	31 <sup>o</sup> 0
	7	—	—	—	—	—	—	—	—	—	—	—
	8	25 <sup>o</sup> 0	26 <sup>o</sup> 3	28 <sup>o</sup> 8	30 <sup>o</sup> 0	31 <sup>o</sup> 6	31 <sup>o</sup> 6	35 <sup>o</sup> 8	36 <sup>o</sup> 2	31 <sup>o</sup> 7	32 <sup>o</sup> 0	31 <sup>o</sup> 7
	9	19 <sup>o</sup> 1	19 <sup>o</sup> 1	18 <sup>o</sup> 8	20 <sup>o</sup> 3	21 <sup>o</sup> 8	21 <sup>o</sup> 8	21 <sup>o</sup> 5	21 <sup>o</sup> 3	21 <sup>o</sup> 4	21 <sup>o</sup> 4	21 <sup>o</sup> 3
	10	22 <sup>o</sup> 7	23 <sup>o</sup> 4	27 <sup>o</sup> 3	31 <sup>o</sup> 0	33 <sup>o</sup> 8	35 <sup>o</sup> 2	36 <sup>o</sup> 1	36 <sup>o</sup> 8	37 <sup>o</sup> 1	37 <sup>o</sup> 1	36 <sup>o</sup> 4
	11	15 <sup>o</sup> 0	15 <sup>o</sup> 2	17 <sup>o</sup> 1	19 <sup>o</sup> 6	20 <sup>o</sup> 1	20 <sup>o</sup> 6	20 <sup>o</sup> 8	21 <sup>o</sup> 7	22 <sup>o</sup> 5	22 <sup>o</sup> 5	21 <sup>o</sup> 9
	12	6 <sup>o</sup> 4	6 <sup>o</sup> 8	10 <sup>o</sup> 6	15 <sup>o</sup> 3	17 <sup>o</sup> 8	19 <sup>o</sup> 1	20 <sup>o</sup> 2	21 <sup>o</sup> 3	22 <sup>o</sup> 5	23 <sup>o</sup> 4	22 <sup>o</sup> 5
	13	10 <sup>o</sup> 3	9 <sup>o</sup> 9	12 <sup>o</sup> 6	15 <sup>o</sup> 4	19 <sup>o</sup> 4	21 <sup>o</sup> 8	23 <sup>o</sup> 6	24 <sup>o</sup> 3	26 <sup>o</sup> 9	26 <sup>o</sup> 5	25 <sup>o</sup> 1
	14	—	—	—	—	—	—	—	—	—	—	—
	15	13 <sup>o</sup> 9	15 <sup>o</sup> 2	16 <sup>o</sup> 4	17 <sup>o</sup> 9	19 <sup>o</sup> 7	22 <sup>o</sup> 7	21 <sup>o</sup> 5	24 <sup>o</sup> 3	24 <sup>o</sup> 4	23 <sup>o</sup> 3	22 <sup>o</sup> 1
	16	10 <sup>o</sup> 0	10 <sup>o</sup> 2	13 <sup>o</sup> 0	15 <sup>o</sup> 0	18 <sup>o</sup> 3	19 <sup>o</sup> 5	22 <sup>o</sup> 7	20 <sup>o</sup> 2	21 <sup>o</sup> 0	22 <sup>o</sup> 7	21 <sup>o</sup> 7
	17	15 <sup>o</sup> 0	16 <sup>o</sup> 5	20 <sup>o</sup> 0	23 <sup>o</sup> 8	27 <sup>o</sup> 0	32 <sup>o</sup> 0	33 <sup>o</sup> 5	33 <sup>o</sup> 1	35 <sup>o</sup> 1	34 <sup>o</sup> 6	34 <sup>o</sup> 3
	18	29 <sup>o</sup> 2	30 <sup>o</sup> 2	32 <sup>o</sup> 5	31 <sup>o</sup> 6	35 <sup>o</sup> 1	38 <sup>o</sup> 1	38 <sup>o</sup> 6	38 <sup>o</sup> 9	40 <sup>o</sup> 3	40 <sup>o</sup> 2	42 <sup>o</sup> 8
	19	24 <sup>o</sup> 6	26 <sup>o</sup> 3	29 <sup>o</sup> 8	31 <sup>o</sup> 3	31 <sup>o</sup> 7	36 <sup>o</sup> 0	37 <sup>o</sup> 3	36 <sup>o</sup> 6	36 <sup>o</sup> 4	37 <sup>o</sup> 0	37 <sup>o</sup> 3
	20	32 <sup>o</sup> 9	33 <sup>o</sup> 1	33 <sup>o</sup> 1	34 <sup>o</sup> 5	35 <sup>o</sup> 7	37 <sup>o</sup> 2	39 <sup>o</sup> 0	39 <sup>o</sup> 9	38 <sup>o</sup> 4	38 <sup>o</sup> 6	37 <sup>o</sup> 3
	21	—	—	—	—	—	—	—	—	—	—	—
	22	25 <sup>o</sup> 7	27 <sup>o</sup> 3	29 <sup>o</sup> 6	30 <sup>o</sup> 7	31 <sup>o</sup> 3	31 <sup>o</sup> 6	32 <sup>o</sup> 0	32 <sup>o</sup> 2	32 <sup>o</sup> 0	31 <sup>o</sup> 8	31 <sup>o</sup> 7
	23	33 <sup>o</sup> 8	34 <sup>o</sup> 7	34 <sup>o</sup> 7	31 <sup>o</sup> 9	36 <sup>o</sup> 1	37 <sup>o</sup> 5	40 <sup>o</sup> 2	39 <sup>o</sup> 2	41 <sup>o</sup> 6	41 <sup>o</sup> 6	40 <sup>o</sup> 4
	24	28 <sup>o</sup> 2	29 <sup>o</sup> 2	30 <sup>o</sup> 3	32 <sup>o</sup> 1	33 <sup>o</sup> 2	31 <sup>o</sup> 9	35 <sup>o</sup> 4	37 <sup>o</sup> 3	37 <sup>o</sup> 3	38 <sup>o</sup> 7	37 <sup>o</sup> 9
	25	31 <sup>o</sup> 5	33 <sup>o</sup> 5	38 <sup>o</sup> 6	41 <sup>o</sup> 2	44 <sup>o</sup> 1	42 <sup>o</sup> 5	42 <sup>o</sup> 1	41 <sup>o</sup> 2	42 <sup>o</sup> 5	42 <sup>o</sup> 1	41 <sup>o</sup> 6
	26	32 <sup>o</sup> 4	31 <sup>o</sup> 5	32 <sup>o</sup> 4	32 <sup>o</sup> 0	33 <sup>o</sup> 1	33 <sup>o</sup> 8	35 <sup>o</sup> 3	36 <sup>o</sup> 1	37 <sup>o</sup> 4	36 <sup>o</sup> 7	31 <sup>o</sup> 8
	27	18 <sup>o</sup> 5	17 <sup>o</sup> 9	18 <sup>o</sup> 9	20 <sup>o</sup> 5	22 <sup>o</sup> 1	23 <sup>o</sup> 3	23 <sup>o</sup> 8	24 <sup>o</sup> 4	21 <sup>o</sup> 7	25 <sup>o</sup> 5	25 <sup>o</sup> 5
	28	—	—	—	—	—	—	—	—	—	—	—
	29	32 <sup>o</sup> 0	31 <sup>o</sup> 0	37 <sup>o</sup> 4	40 <sup>o</sup> 7	42 <sup>o</sup> 5	43 <sup>o</sup> 4	44 <sup>o</sup> 4	43 <sup>o</sup> 1	40 <sup>o</sup> 8	38 <sup>o</sup> 5	36 <sup>o</sup> 9
	30	23 <sup>o</sup> 6	23 <sup>o</sup> 8	26 <sup>o</sup> 9	26 <sup>o</sup> 5	27 <sup>o</sup> 1	28 <sup>o</sup> 4	27 <sup>o</sup> 8	26 <sup>o</sup> 7	26 <sup>o</sup> 5	25 <sup>o</sup> 7	21 <sup>o</sup> 8
	31	14 <sup>o</sup> 3	16 <sup>o</sup> 2	17 <sup>o</sup> 9	18 <sup>o</sup> 7	20 <sup>o</sup> 8	22 <sup>o</sup> 3	24 <sup>o</sup> 3	25 <sup>o</sup> 5	26 <sup>o</sup> 1	27 <sup>o</sup> 0	27 <sup>o</sup> 0
Hourly Means.	21 <sup>o</sup> 66	22 <sup>o</sup> 20	24 <sup>o</sup> 59	26 <sup>o</sup> 81	28 <sup>o</sup> 64	30 <sup>o</sup> 24	31 <sup>o</sup> 21	31 <sup>o</sup> 53	32 <sup>o</sup> 05	31 <sup>o</sup> 89	31 <sup>o</sup> 33	31 <sup>o</sup> 70
APRIL.	1	9 <sup>o</sup> 2	13 <sup>o</sup> 9	19 <sup>o</sup> 2	27 <sup>o</sup> 5	29 <sup>o</sup> 8	31 <sup>o</sup> 3	31 <sup>o</sup> 8	32 <sup>o</sup> 4	32 <sup>o</sup> 2	33 <sup>o</sup> 3	32 <sup>o</sup> 8
	2	—	—	—	—	—	—	—	—	—	—	—
	3	28 <sup>o</sup> 6	31 <sup>o</sup> 9	31 <sup>o</sup> 5	38 <sup>o</sup> 5	40 <sup>o</sup> 0	42 <sup>o</sup> 2	42 <sup>o</sup> 6	41 <sup>o</sup> 9	41 <sup>o</sup> 1	41 <sup>o</sup> 2	39 <sup>o</sup> 9
	4	—	—	—	—	—	—	—	—	—	—	—
	5	31 <sup>o</sup> 4	36 <sup>o</sup> 7	39 <sup>o</sup> 7	40 <sup>o</sup> 8	41 <sup>o</sup> 9	41 <sup>o</sup> 7	41 <sup>o</sup> 5	41 <sup>o</sup> 8	42 <sup>o</sup> 2	39 <sup>o</sup> 8	40 <sup>o</sup> 1
	6	38 <sup>o</sup> 3	38 <sup>o</sup> 8	41 <sup>o</sup> 5	43 <sup>o</sup> 1	44 <sup>o</sup> 4	46 <sup>o</sup> 5	44 <sup>o</sup> 0	45 <sup>o</sup> 6	46 <sup>o</sup> 1	48 <sup>o</sup> 4	49 <sup>o</sup> 1
	7	40 <sup>o</sup> 0	42 <sup>o</sup> 1	42 <sup>o</sup> 9	43 <sup>o</sup> 6	46 <sup>o</sup> 3	48 <sup>o</sup> 1	50 <sup>o</sup> 6	52 <sup>o</sup> 2	53 <sup>o</sup> 9	55 <sup>o</sup> 6	55 <sup>o</sup> 2
	8	41 <sup>o</sup> 9	41 <sup>o</sup> 7	43 <sup>o</sup> 1	45 <sup>o</sup> 4	48 <sup>o</sup> 1	49 <sup>o</sup> 9	58 <sup>o</sup> 3	58 <sup>o</sup> 3	55 <sup>o</sup> 0	55 <sup>o</sup> 8	59 <sup>o</sup> 9
	9	34 <sup>o</sup> 3	35 <sup>o</sup> 3	36 <sup>o</sup> 6	39 <sup>o</sup> 5	41 <sup>o</sup> 3	42 <sup>o</sup> 9	43 <sup>o</sup> 8	45 <sup>o</sup> 5	46 <sup>o</sup> 4	45 <sup>o</sup> 7	43 <sup>o</sup> 6
	10	38 <sup>o</sup> 5	41 <sup>o</sup> 2	45 <sup>o</sup> 2	46 <sup>o</sup> 2	48 <sup>o</sup> 4	47 <sup>o</sup> 4	47 <sup>o</sup> 6	49 <sup>o</sup> 2	48 <sup>o</sup> 5	44 <sup>o</sup> 3	44 <sup>o</sup> 5
	11	—	—	—	—	—	—	—	—	—	—	—
	12	33 <sup>o</sup> 5	36 <sup>o</sup> 5	41 <sup>o</sup> 2	46 <sup>o</sup> 4	48 <sup>o</sup> 7	48 <sup>o</sup> 7	48 <sup>o</sup> 3	48 <sup>o</sup> 7	47 <sup>o</sup> 1	47 <sup>o</sup> 4	46 <sup>o</sup> 9
	13	29 <sup>o</sup> 3	36 <sup>o</sup> 8	40 <sup>o</sup> 5	42 <sup>o</sup> 6	44 <sup>o</sup> 0	44 <sup>o</sup> 5	46 <sup>o</sup> 5	46 <sup>o</sup> 9	47 <sup>o</sup> 1	45 <sup>o</sup> 7	45 <sup>o</sup> 7
	14	31 <sup>o</sup> 7	35 <sup>o</sup> 4	39 <sup>o</sup> 4	43 <sup>o</sup> 5	45 <sup>o</sup> 6	46 <sup>o</sup> 3	45 <sup>o</sup> 8	46 <sup>o</sup> 3	45 <sup>o</sup> 9	45 <sup>o</sup> 5	43 <sup>o</sup> 4
	15	31 <sup>o</sup> 7	33 <sup>o</sup> 0	34 <sup>o</sup> 3	35 <sup>o</sup> 7	34 <sup>o</sup> 9	37 <sup>o</sup> 7	37 <sup>o</sup> 4	36 <sup>o</sup> 9	37 <sup>o</sup> 6	38 <sup>o</sup> 9	37 <sup>o</sup> 1
	16	25 <sup>o</sup> 9	29 <sup>o</sup> 2	32 <sup>o</sup> 3	37 <sup>o</sup> 6	38 <sup>o</sup> 5	38 <sup>o</sup> 6	40 <sup>o</sup> 0	40 <sup>o</sup> 5	38 <sup>o</sup> 4	36 <sup>o</sup> 4	37 <sup>o</sup> 0
	17	33 <sup>o</sup> 8	33 <sup>o</sup> 4	34 <sup>o</sup> 3	35 <sup>o</sup> 1	36 <sup>o</sup> 0	36 <sup>o</sup> 2	36 <sup>o</sup> 2	35 <sup>o</sup> 5	33 <sup>o</sup> 7	33 <sup>o</sup> 0	33 <sup>o</sup> 4
	18	—	—	—	—	—	—	—	—	—	—	—
	19	29 <sup>o</sup> 6	31 <sup>o</sup> 3	33 <sup>o</sup> 1	35 <sup>o</sup> 1	36 <sup>o</sup> 7	39 <sup>o</sup> 8	42 <sup>o</sup> 7	42 <sup>o</sup> 5	44 <sup>o</sup> 0	44 <sup>o</sup> 4	45 <sup>o</sup> 9
	20	34 <sup>o</sup> 4	36 <sup>o</sup> 0	37 <sup>o</sup> 4	39 <sup>o</sup> 7	41 <sup>o</sup> 7	41 <sup>o</sup> 5	46 <sup>o</sup> 2	45 <sup>o</sup> 1	44 <sup>o</sup> 6	43 <sup>o</sup> 6	43 <sup>o</sup> 0
	21	42 <sup>o</sup> 6	41 <sup>o</sup> 6	43 <sup>o</sup> 4	45 <sup>o</sup> 4	45 <sup>o</sup> 9	54 <sup>o</sup> 4	57 <sup>o</sup> 0	63 <sup>o</sup> 3	65 <sup>o</sup> 5	65 <sup>o</sup> 4	65 <sup>o</sup> 0
	22	49 <sup>o</sup> 3	49 <sup>o</sup> 9	52 <sup>o</sup> 1	51 <sup>o</sup> 2	51 <sup>o</sup> 0	49 <sup>o</sup> 3	47 <sup>o</sup> 9	46 <sup>o</sup> 9	45 <sup>o</sup> 9	45 <sup>o</sup> 5	45 <sup>o</sup> 3
	23	36 <sup>o</sup> 3	36 <sup>o</sup> 4	36 <sup>o</sup> 9	38 <sup>o</sup> 9	40 <sup>o</sup> 0	40 <sup>o</sup> 7	41 <sup>o</sup> 2	41 <sup>o</sup> 0	42 <sup>o</sup> 9	45 <sup>o</sup> 9	42 <sup>o</sup> 8
	24	31 <sup>o</sup> 0	34 <sup>o</sup> 5	38 <sup>o</sup> 5	41 <sup>o</sup> 6	43 <sup>o</sup> 0	44 <sup>o</sup> 0	44 <sup>o</sup> 8	45 <sup>o</sup> 4	45 <sup>o</sup> 2	44 <sup>o</sup> 7	45 <sup>o</sup> 5
	25	—	—	—	—	—	—	—	—	—	—	—
	26	47 <sup>o</sup> 9	49 <sup>o</sup> 1	50 <sup>o</sup> 7	54 <sup>o</sup> 2	55 <sup>o</sup> 8	58 <sup>o</sup> 4	59 <sup>o</sup> 9	58 <sup>o</sup> 0	58 <sup>o</sup> 5	56 <sup>o</sup> 5	58 <sup>o</sup> 5
	27	43 <sup>o</sup> 8	44 <sup>o</sup> 5	43 <sup>o</sup> 8	42 <sup>o</sup> 4	42 <sup>o</sup> 0	42 <sup>o</sup> 9	43 <sup>o</sup> 4	43 <sup>o</sup> 6	44 <sup>o</sup> 6	43 <sup>o</sup> 8	42 <sup>o</sup> 6
	28	39 <sup>o</sup> 5	33 <sup>o</sup> 7	36 <sup>o</sup> 8	40 <sup>o</sup> 0	40 <sup>o</sup> 2	42 <sup>o</sup> 5	43 <sup>o</sup> 2	40 <sup>o</sup> 7	40 <sup>o</sup> 1	39 <sup>o</sup> 6	37 <sup>o</sup> 1
	29	34 <sup>o</sup> 9	35 <sup>o</sup> 5	36 <sup>o</sup> 1	36 <sup>o</sup> 5	36 <sup>o</sup> 1	37 <sup>o</sup> 3	39 <sup>o</sup> 2	39 <sup>o</sup> 7	41 <sup>o</sup> 6	45 <sup>o</sup> 1	41 <sup>o</sup> 5
	30	36 <sup>o</sup> 7	37 <sup>o</sup> 1	37 <sup>o</sup> 9	40 <sup>o</sup> 7	41 <sup>o</sup> 9	43 <sup>o</sup> 6	44 <sup>o</sup> 5	45 <sup>o</sup> 0	45 <sup>o</sup> 5	48 <sup>o</sup> 1	44 <sup>o</sup> 5
	Hourly Means.	34 <sup>o</sup> 60	36 <sup>o</sup> 75	38 <sup>o</sup> 99	41 <sup>o</sup> 20	42 <sup>o</sup> 40	43 <sup>o</sup> 99	45 <sup>o</sup> 02	45 <sup>o</sup> 25	45 <sup>o</sup> 39	45 <sup>o</sup> 37	44 <sup>o</sup> 91

STANDARD THERMOMETER.													Daily and Monthly Means.		
12	13	14	15	16	17	18	19	20	21	22	23				
6	7	8	9	10	11	12	13	14	15	16	17				
29°6	28°9	27°9	26°4	26°1	25°4	25°7	25°2	24°4	24°0	23°5	23°5	22°0	21°6	19°5	24°92
30°2	29°2	27°0	24°6	24°4	24°3	23°7	23°5	23°4	21°2	21°5	20°5	20°1	21°2	22°5	24°17
36°0	36°0	35°5	33°6	31°7	31°3	25°6	24°2	20°0	20°9	19°1	22°9	24°4	24°3	18°4	28°37
33°3	32°2	31°6	30°5	29°2	27°8	26°4	22°0	20°1	18°5	16°2	15°9	13°6	13°6	14°1	23°85
30°5	30°5	30°4	28°2	24°5	25°6	26°8	26°2	25°2	25°1	26°6	27°6	28°0	27°6	27°3	25°30
35°1	31°0	31°5	32°6	32°6	32°8	33°1	32°5	32°6	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	30°1	38°8	34°1	33°2	30°4	28°2	33°55
32°0	31°7	31°2	27°1	24°2	22°1	20°8	20°0	19°1	18°9	18°8	18°5	18°6	18°9	19°1	25°89
31°4	24°3	20°9	21°5	21°8	22°5	24°0	25°2	25°7	24°8	23°0	22°9	22°2	22°4	22°5	24°97
37°1	36°4	35°5	33°5	32°0	30°3	24°3	24°6	20°3	20°1	19°8	19°3	17°1	16°5	14°5	27°57
22°5	21°9	21°6	19°9	17°8	16°4	14°0	14°5	10°4	8°9	8°6	6°1	4°8	5°0	4°9	15°28
33°4	22°5	21°5	19°5	19°1	16°8	15°8	14°1	13°5	13°3	12°9	13°2	13°2	12°3	11°1	15°91
36°5	25°1	24°6	22°4	20°4	19°0	18°6	18°6	18°3	—	—	—	—	—	—	20°10
—	—	—	—	—	—	—	—	—	26°5	24°0	22°3	20°0	16°7	15°4	—
23°3	22°1	21°5	19°4	17°5	16°3	13°9	13°6	13°6	13°9	12°7	12°1	12°2	12°1	10°5	17°08
22°7	21°7	22°0	21°7	20°4	19°0	17°3	15°7	14°7	13°9	13°2	13°0	12°5	13°6	15°5	17°08
1°6	34°3	33°8	31°7	30°8	30°7	30°3	29°9	30°0	30°2	30°2	29°8	29°1	29°6	29°6	29°19
40°2	42°8	42°1	39°1	36°3	33°6	31°9	29°9	28°7	27°6	26°9	26°2	26°3	26°2	24°9	33°34
37°0	37°3	34°9	31°9	29°6	28°1	26°9	28°6	29°9	29°2	30°3	31°3	32°2	32°4	32°5	31°89
8°6	37°3	37°1	37°1	37°1	36°8	39°1	36°1	35°1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	27°3	25°4	24°6	24°6	24°7	24°5	33°72
1°8	31°7	32°0	32°1	32°4	32°4	32°2	32°3	32°6	33°2	33°1	33°0	33°2	33°5	33°7	31°75
1°6	40°4	30°8	30°7	37°1	36°3	35°3	34°6	34°3	33°2	32°5	32°1	31°4	31°1	30°7	35°99
8°7	37°9	36°7	35°0	33°1	32°8	32°2	32°6	30°7	31°2	31°2	31°1	31°1	31°1	33°7	33°51
2°4	41°6	30°1	30°0	37°6	36°9	36°4	36°0	35°0	33°8	34°7	33°7	33°5	32°1	32°0	37°85
6°7	31°8	31°3	32°2	32°0	32°2	34°1	30°1	29°2	28°0	27°1	25°9	24°6	23°9	19°7	31°09
5°5	25°5	26°3	24°5	21°9	23°6	22°3	22°0	22°3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	32°2	32°3	32°2	31°9	32°6	32°9	25°26
8°5	36°9	35°0	31°8	30°8	29°2	28°0	26°9	26°7	26°2	25°7	25°5	25°5	25°1	24°7	33°12
5°7	24°8	24°7	22°2	22°1	22°6	22°2	24°3	24°0	24°0	20°8	20°4	18°1	17°8	16°2	23°27
3°0	27°0	26°1	23°8	21°7	20°2	17°5	14°1	13°2	15°2	13°0	13°0	10°3	8°4	8°8	18°56
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1°89	31°33	30°70	28°97	27°67	26°87	25°80	24°74	24°06	24°33	23°77	23°44	22°85	22°51	21°75	26°65
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1°3	32°8	31°7	31°0	29°9	29°6	30°1	30°8	31°2	—	—	—	—	—	—	28°68
1°2	39°9	30°6	38°7	35°9	33°4	31°7	30°7	30°2	33°0	29°6	29°0	31°3	29°6	28°0	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1°8	30°1	38°4	36°9	35°8	35°9	36°1	36°1	37°3	37°3	37°9	37°7	36°6	37°4	38°1	38°25
8°1	19°1	30°1	18°4	46°3	44°7	44°0	42°1	41°6	41°2	41°9	40°4	40°4	40°4	39°8	43°59
5°6	55°5	55°2	48°3	44°2	40°8	40°1	38°0	36°6	38°3	37°8	38°1	39°2	40°3	41°4	44°57
5°8	59°9	56°9	36°6	41°5	43°2	41°6	41°2	40°7	39°0	38°1	36°3	35°4	34°9	34°7	45°44
3°3	45°7	43°6	41°5	39°2	38°7	38°3	37°0	36°9	37°1	37°5	37°5	37°5	39°6	38°7	39°98
4°3	44°5	40°7	41°6	39°0	38°6	37°8	36°6	35°8	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	34°5	35°4	35°4	35°5	35°9	34°9	41°07
—	—	—	—	—	—	—	—	—	33°0	33°0	33°8	31°1	29°6	27°8	40°19
—	—	—	—	—	—	—	—	—	34°5	38°7	36°3	34°9	34°0	32°0	39°63
—	—	—	—	—	—	—	—	—	33°7	33°3	32°9	32°8	31°8	31°7	38°92
—	—	—	—	—	—	—	—	—	27°5	27°5	25°9	25°1	24°2	22°2	32°48
—	—	—	—	—	—	—	—	—	33°1	32°2	32°6	32°2	33°3	33°5	34°95
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	26°1	24°8	26°3	27°2	28°5	29°6	30°34
—	—	—	—	—	—	—	—	—	34°9	32°3	30°5	29°7	29°7	32°0	37°13
—	—	—	—	—	—	—	—	—	44°4	43°8	44°0	43°6	43°7	44°6	42°76
—	—	—	—	—	—	—	—	—	58°1	55°6	52°0	53°8	55°6	54°4	55°50
—	—	—	—	—	—	—	—	—	40°5	39°7	37°1	36°9	36°7	36°3	44°05
—	—	—	—	—	—	—	—	—	32°0	30°5	29°7	30°0	29°7	30°1	36°51
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	41°4	43°3	42°8	42°3	41°6	44°3	41°15
—	—	—	—	—	—	—	—	—	45°8	46°5	46°1	46°3	45°0	42°5	50°75
—	—	—	—	—	—	—	—	—	28°7	28°6	26°2	25°1	24°2	24°2	36°59
—	—	—	—	—	—	—	—	—	34°3	34°3	34°3	34°5	34°5	34°5	36°65
—	—	—	—	—	—	—	—	—	37°1	40°5	40°7	39°3	38°3	37°1	38°20
—	—	—	—	—	—	—	—	—	33°5	33°5	32°0	30°7	29°1	27°8	38°19
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
41°87	39°52	38°43	37°50	36°70	36°08	36°76	36°25	35°87	35°60	35°21	34°97	34°97	34°97	34°97	39°69

STANDARD THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	—	—	—	—	—	—	—	—	—	—	
	4	38°8	44°1	48°1	49°8	52°7	53°7	55°6	54°7	52°5	53°0	52°6	51°8
	5	36°9	46°6	51°5	53°3	57°0	59°0	59°2	61°7	61°5	61°1	60°6	—
	6	40°5	46°8	51°8	54°9	57°3	60°2	63°5	62°8	61°3	59°6	57°7	57°3
	7	41°6	50°5	53°6	56°5	57°8	59°0	59°6	61°4	62°4	58°0	59°2	60°4
	8	48°1	49°6	52°5	57°0	56°4	55°7	56°3	57°2	62°4	61°7	61°6	60°7
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	48°8	52°9	55°9	58°0	59°8	59°8	59°4	59°7	61°7	61°5	61°6	59°5
	11	52°5	52°5	53°7	59°8	65°1	64°1	64°7	64°0	63°4	63°6	59°8	58°9
	12	54°2	55°4	60°2	61°4	63°4	65°3	66°2	66°4	61°9	61°6	62°2	61°2
	13	51°7	58°0	60°0	60°0	60°8	60°4	60°8	63°2	63°2	63°8	61°5	64°1
	14	58°1	58°5	59°5	60°4	59°4	59°0	57°6	56°6	56°8	58°1	60°6	61°8
	15	47°6	56°1	69°9	63°8	64°4	66°2	67°2	66°8	68°3	69°6	67°4	65°3
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	46°0	52°5	58°8	61°0	63°7	61°4	63°3	64°7	61°9	65°3	65°8	65°1
	18	47°1	53°7	58°5	62°3	61°6	67°1	69°2	69°8	66°7	67°6	67°4	67°2
	19	50°4	54°1	58°5	61°2	61°9	63°0	63°2	65°7	66°0	65°7	65°3	65°7
	20	49°6	52°9	56°3	60°5	62°1	62°3	63°0	62°8	63°0	62°3	61°8	58°4
	21	48°3	50°6	50°8	53°5	52°7	55°4	59°0	62°2	62°8	63°3	60°7	58°8
	22	57°2	60°4	58°8	61°3	64°9	68°8	68°4	64°5	67°0	67°0	61°6	61°4
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	55°8	57°2	58°0	57°3	58°0	58°8	59°7	61°9	63°1	63°1	61°8	63°7
	25	50°5	53°7	57°7	61°1	61°8	62°9	63°2	65°5	66°3	63°0	58°9	60°1
	26	39°6	41°7	44°7	46°9	49°1	52°1	52°2	52°9	53°9	56°4	58°1	56°9
	27	45°3	50°9	54°2	54°7	56°9	58°7	57°6	56°0	58°3	58°5	58°9	59°5
	28	54°1	54°0	56°2	56°9	64°0	68°0	71°9	72°1	72°4	68°8	67°8	66°9
	29	57°5	55°7	56°8	62°9	60°9	61°5	59°3	58°3	62°1	64°6	60°7	65°7
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	48°5	47°7	47°6	47°0	45°9	45°2	44°5	44°2	44°2	44°2	44°4	44°4
Hourly Means	48°61	52°31	55°19	57°56	59°23	60°32	61°03	61°48	62°05	61°85	61°25	60°64	
JUNE.	1	45°9	45°9	48°2	52°8	55°6	60°7	62°3	60°9	60°5	56°0	58°6	57°7
	2	52°6	53°0	51°6	56°2	58°9	60°5	62°9	61°9	59°9	59°9	60°3	61°5
	3	48°7	55°6	56°5	56°5	57°6	59°5	62°4	61°6	58°6	59°4	58°3	56°2
	4	54°7	56°0	58°7	57°7	58°9	61°3	62°7	59°7	59°3	58°1	55°0	53°8
	5	41°9	44°8	49°1	50°4	53°8	57°1	59°9	59°5	59°9	62°0	61°0	63°6
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	50°8	53°0	62°1	61°7	65°3	66°9	67°7	70°1	70°8	70°3	67°5	64°5
	8	55°2	55°6	55°7	57°1	59°9	58°9	58°2	58°7	61°5	62°1	60°6	58°1
	9	56°3	58°4	62°2	66°0	66°7	68°5	69°1	72°7	74°1	74°1	75°5	72°5
	10	63°2	63°7	64°8	63°7	63°1	63°1	63°6	63°7	63°9	61°8	62°7	62°9
	11	58°0	61°3	65°0	66°7	65°3	67°0	62°7	65°1	61°2	59°4	58°5	57°3
	12	49°1	52°8	57°7	59°9	60°5	60°7	62°3	64°6	65°2	65°7	66°9	66°3
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	55°0	55°0	54°8	50°4	49°7	50°0	48°2	44°6	44°6	48°5	48°6	49°1
	15	36°8	41°3	42°9	44°6	46°3	47°6	48°7	52°0	55°7	57°9	58°9	58°5
	16	46°9	49°1	51°8	53°5	55°2	56°0	56°1	54°8	55°0	56°3	57°1	56°7
	17	48°5	53°0	57°5	57°7	60°3	60°9	62°3	61°5	63°5	65°0	68°2	67°7
	18	52°6	58°3	58°3	60°9	61°7	64°8	65°8	65°6	64°9	64°2	62°4	59°5
	19	56°0	56°2	57°9	59°7	62°1	62°1	61°3	62°6	60°5	61°5	65°6	67°4
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	55°6	59°5	63°1	63°9	65°2	65°2	67°0	67°3	59°4	63°0	66°3	67°1
	22	53°3	54°8	53°4	59°7	62°1	65°7	67°0	68°7	68°5	62°9	60°3	63°3
	23	57°1	61°7	64°8	67°7	65°8	69°9	69°6	70°1	70°1	71°4	70°7	67°6
	24	57°4	64°1	66°7	69°1	71°7	72°7	72°3	72°3	73°4	73°7	74°1	74°9
	25	60°3	65°3	63°5	66°9	69°2	71°1	71°5	73°5	73°9	75°3	72°9	68°7
	26	63°7	68°2	72°9	74°9	75°2	78°2	75°8	76°5	74°5	76°5	71°3	74°7
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	62°1	62°7	63°1	66°8	68°1	67°7	69°9	73°1	74°1	75°2	74°4	70°7
	29	59°3	60°8	62°5	64°7	66°6	68°8	70°4	70°8	72°7	68°1	68°3	68°3
	30	58°9	63°0	68°8	70°9	71°5	69°7	72°0	72°1	72°4	70°9	70°8	69°6
Hourly Means	53°96	56°73	58°98	60°97	62°24	63°64	64°30	64°77	64°54	64°70	64°64	63°76	

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
53°0	52°6	51°8	49°8	48°0	46°8	44°9	42°4	38°3	38°5	43°4	42°6	39°1	35°1	33°4	46°24
61°1	60°6	—	53°0	50°1	48°3	45°6	42°4	40°6	39°8	37°2	36°7	36°7	36°0	35°9	48°29
59°6	57°7	57°3	54°8	49°7	47°4	45°9	46°1	43°9	43°2	42°2	40°4	39°6	39°2	38°0	50°17
58°0	59°2	60°1	59°4	56°2	55°9	50°6	49°2	53°3	51°7	55°2	56°0	57°5	57°3	59°8	56°05
64°7	61°6	60°7	58°6	57°2	57°6	57°3	57°4	56°3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61°5	61°6	59°5	56°3	55°7	54°4	53°5	52°8	54°7	51°6	48°3	51°3	51°8	50°2	48°6	55°35
63°6	59°8	58°9	57°7	54°1	53°7	53°5	55°1	56°0	54°2	53°4	53°1	51°3	51°3	55°6	57°27
61°6	62°2	61°2	60°0	61°0	60°5	59°8	60°0	57°3	58°1	57°7	55°7	59°5	54°3	51°3	60°05
63°8	64°5	64°1	61°0	59°6	57°7	53°8	52°0	52°1	51°1	50°0	50°4	49°7	49°5	48°3	57°15
58°1	60°6	61°8	57°0	56°6	53°8	52°5	49°6	49°8	45°6	44°1	43°4	42°7	42°9	42°3	53°40
69°6	67°1	65°3	65°0	59°5	54°7	52°4	51°8	51°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
65°3	65°8	64°1	63°4	61°7	61°2	59°3	56°2	52°3	55°2	51°5	50°8	46°3	45°3	43°2	57°88
67°6	67°4	67°2	65°2	59°7	56°7	51°2	53°4	52°0	51°8	50°9	50°0	49°8	49°8	48°3	57°66
65°7	65°3	65°7	65°3	63°7	60°3	59°2	58°7	56°4	55°8	51°1	52°9	51°6	50°1	50°8	59°28
62°3	61°8	58°1	57°4	54°7	53°6	50°6	49°4	47°7	46°5	45°9	43°7	43°3	42°9	44°6	33°97
63°3	60°7	58°8	59°3	55°2	54°8	49°2	48°1	51°5	51°3	53°4	51°8	52°4	53°2	54°3	54°69
67°0	61°6	61°4	60°5	60°0	59°3	59°3	57°5	56°3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63°1	64°8	63°7	61°5	59°7	59°1	56°2	55°8	53°5	52°6	49°7	49°2	48°7	47°3	48°4	56°80
63°0	58°9	60°1	59°9	59°6	57°9	55°9	55°9	46°8	45°2	43°1	41°3	40°0	39°6	38°3	54°53
56°4	58°1	56°9	54°9	48°1	47°1	45°1	43°9	41°7	40°0	39°6	40°2	40°0	36°8	37°5	46°64
58°5	58°9	59°5	59°2	55°3	51°9	49°8	48°6	46°9	46°3	45°2	43°2	44°6	44°6	45°8	52°04
68°8	67°8	66°9	66°9	63°1	60°3	61°1	63°7	62°7	61°1	60°9	57°2	55°5	57°5	56°6	62°75
64°6	60°7	65°7	61°5	58°5	55°7	56°3	56°0	56°0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
44°2	44°4	44°1	44°8	44°8	45°0	45°9	46°1	46°8	47°2	47°0	47°0	47°3	47°6	47°3	46°04
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
61°85	61°25	60°94	58°98	56°33	51°80	53°16	52°14	51°09	49°93	49°38	48°49	47°79	47°19	47°23	54°91
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56°0	58°6	57°7	57°3	56°3	51°5	51°0	51°3	53°1	52°1	51°0	50°4	49°7	51°3	52°0	54°24
59°9	60°3	61°5	60°4	57°0	51°7	53°0	52°1	48°9	48°2	46°7	45°3	45°2	44°1	41°9	51°29
59°4	58°3	56°2	56°5	56°2	55°0	51°4	52°4	52°4	53°2	53°4	53°8	51°0	53°8	53°7	55°82
58°1	55°0	53°8	53°6	52°8	51°6	47°3	46°1	45°0	43°0	42°1	39°8	37°9	37°2	36°7	51°17
62°0	61°0	63°3	61°1	60°3	55°6	53°0	48°1	45°6	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
70°3	67°5	64°3	60°1	58°0	55°3	56°0	55°4	55°4	51°0	50°4	45°9	41°6	42°6	43°6	52°83
62°1	60°6	58°1	57°2	57°1	56°7	55°7	55°7	56°5	55°4	54°1	53°2	53°2	53°1	53°5	59°96
71°1	75°5	72°5	72°7	72°9	69°5	65°0	65°3	67°3	65°5	63°3	62°4	62°4	61°0	60°8	66°81
61°8	62°7	62°9	61°9	61°7	60°3	60°5	59°3	58°6	59°6	61°1	60°3	60°3	57°7	57°1	61°73
59°4	58°5	57°3	55°0	51°4	51°2	51°0	50°7	50°9	50°8	51°0	50°6	49°0	47°9	46°9	56°41
65°7	66°9	66°3	65°1	61°7	59°5	55°8	55°2	51°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
48°5	48°6	49°1	48°0	47°1	44°6	43°2	42°3	41°7	41°3	41°0	41°3	41°3	40°1	39°6	46°13
57°9	58°9	58°5	57°3	55°2	52°1	49°5	47°5	46°8	47°7	47°3	45°0	45°5	44°8	45°2	49°11
56°3	57°1	56°7	55°6	55°8	55°8	47°1	45°7	45°7	44°9	45°1	44°2	43°9	41°7	42°6	50°69
65°0	68°2	67°7	66°2	61°1	51°8	50°6	47°6	47°1	45°6	44°1	43°6	44°0	46°1	48°1	55°28
64°2	62°4	59°5	57°8	57°0	52°5	58°3	58°1	58°5	58°3	56°7	56°7	56°9	56°7	56°7	59°50
61°5	65°6	67°1	66°5	57°9	55°3	53°1	51°6	51°0	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
63°0	66°3	67°1	66°0	60°1	57°5	56°9	56°3	56°3	54°9	54°2	51°6	49°7	49°5	52°0	59°44
62°9	60°3	63°3	63°2	60°4	57°7	56°6	56°7	55°4	55°7	55°1	55°0	50°4	50°4	52°0	58°91
71°4	70°7	67°6	67°5	64°4	61°1	59°1	58°3	55°1	55°8	53°8	53°2	52°8	51°4	51°4	62°39
73°7	74°1	74°9	73°9	69°7	68°4	60°5	58°5	57°5	55°8	54°4	53°4	53°8	53°0	55°5	61°86
75°3	72°9	68°7	68°3	63°7	62°1	61°5	60°7	60°1	61°3	61°9	61°5	61°5	60°9	59°3	65°62
76°5	71°3	74°7	71°6	68°7	67°7	60°3	65°9	61°4	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
75°2	74°3	70°7	69°2	66°9	66°1	64°8	64°5	63°6	62°0	61°3	60°3	59°5	55°7	57°5	65°80
68°1	68°3	68°3	70°5	67°4	63°7	61°9	60°3	59°5	57°9	56°5	56°7	55°4	51°8	55°6	63°40
70°9	70°8	69°6	68°1	64°4	61°1	57°7	56°5	56°7	55°4	52°8	59°8	50°1	50°1	52°0	62°76
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64°70	64°64	63°76	62°74	60°20	57°95	56°07	54°91	54°27	54°01	53°33	52°41	51°80	50°96	51°36	58°47

STANDARD THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JULY.	1	56.7	61.1	65.1	69.9	73.1	72.7	71.5	71.8	76.1	75.4	75.7	71.9
	2	57.1	61.8	70.1	76.2	73.3	74.5	76.5	78.7	78.2	78.9	79.3	79.0
	3	61.5	67.9	73.5	76.5	78.5	80.4	81.7	81.8	81.6	81.2	81.5	79.7
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	62.0	67.6	72.2	77.9	80.1	79.6	80.1	81.3	81.8	80.9	78.2	70.5
	6	67.1	67.7	67.2	69.7	71.2	73.5	75.9	78.7	77.1	76.6	78.7	75.2
	7	65.2	67.8	69.1	76.1	76.9	78.2	80.3	80.3	81.3	81.1	81.3	79.9
	8	67.7	71.1	76.3	79.0	79.7	80.7	80.3	80.3	77.6	78.0	77.6	77.9
	9	68.0	72.5	75.9	78.0	78.7	81.5	81.2	81.2	79.6	79.6	77.2	77.6
	10	69.3	69.9	71.8	74.1	74.9	76.3	76.7	79.5	81.7	80.6	80.5	77.3
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	68.9	74.7	76.3	76.8	78.0	79.7	79.5	79.8	81.7	82.1	83.2	79.1
	13	72.5	75.5	76.8	79.7	81.5	83.3	83.6	83.1	79.7	77.8	77.1	71.5
	14	57.5	61.5	63.3	69.3	70.7	73.3	73.9	71.0	72.7	71.5	70.7	70.2
	15	51.6	58.7	63.7	68.8	71.4	73.3	75.4	76.5	76.7	76.7	75.4	73.0
	16	65.2	70.6	71.0	77.1	79.4	81.1	82.5	83.3	81.7	82.1	80.0	77.8
	17	70.0	71.4	71.3	78.2	82.7	83.5	81.7	83.7	84.3	75.3	76.8	78.2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	71.6	77.4	80.0	80.1	82.9	85.1	87.0	85.1	82.1	85.1	86.1	85.5
	20	71.2	75.7	79.1	77.8	79.7	77.4	79.5	77.6	77.8	80.7	76.3	70.7
	21	69.1	72.0	71.7	73.2	76.5	79.7	79.7	79.4	81.5	79.1	80.3	78.2
	22	69.7	72.0	71.7	72.9	74.7	75.7	77.8	78.2	79.3	78.9	78.2	78.5
	23	53.6	59.3	64.9	69.1	69.9	70.7	71.3	71.4	70.3	72.7	71.5	73.3
	24	58.7	62.8	67.1	69.3	67.9	67.5	67.1	66.1	68.7	69.9	69.5	68.2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	57.8	56.3	55.8	56.0	55.2	56.2	56.3	59.1	62.1	61.7	62.7	63.2
	27	51.2	55.0	58.1	61.5	61.7	63.1	61.1	63.5	63.5	63.3	65.0	63.8
	28	50.8	56.9	62.3	61.6	65.3	65.3	61.1	63.7	65.2	65.2	65.5	65.0
	29	57.7	62.1	61.8	66.8	68.6	70.1	70.7	70.0	68.9	69.0	69.1	68.1
	30	55.9	59.5	60.3	60.1	66.3	63.9	65.2	62.1	63.5	65.3	65.1	69.3
	31	51.4	60.1	61.6	66.1	68.5	68.1	71.5	67.0	68.1	68.7	70.5	67.1
August 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	62.30	66.33	69.33	72.03	71.12	71.62	75.60	75.61	71.92	75.46	75.11	71.05	
AUGUST.	2	52.2	59.1	65.2	66.0	69.5	71.0	71.5	72.5	70.8	72.5	72.3	69.5
	3	55.4	61.9	65.9	69.8	70.3	70.5	70.7	71.1	70.6	72.1	73.2	71.1
	4	59.4	65.6	70.1	70.5	70.9	73.0	73.9	71.2	75.7	75.9	76.9	76.3
	5	59.9	65.4	69.2	70.9	71.5	72.7	72.9	73.1	74.7	71.5	73.1	71.5
	6	63.1	65.7	71.5	74.3	77.8	77.6	77.7	76.5	78.5	76.7	75.1	70.3
	7	59.5	60.1	61.6	67.1	68.9	72.7	73.1	73.1	71.2	71.3	79.2	68.9
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	63.1	63.5	61.1	66.2	66.9	68.9	71.1	73.2	73.1	71.6	73.7	71.3
	10	61.7	66.3	67.9	71.6	71.9	76.2	76.1	76.5	77.8	76.0	75.1	71.3
	11	66.1	67.4	69.7	68.2	68.9	70.1	72.1	73.3	71.1	67.3	69.1	69.9
	12	57.7	59.3	63.9	69.1	73.5	71.8	73.3	71.8	75.5	75.1	72.3	73.9
	13	63.5	66.9	78.1	78.1	71.9	71.5	75.5	75.3	77.2	71.3	71.2	73.3
	14	66.3	69.1	71.6	71.3	77.4	77.2	77.8	79.6	75.7	78.9	76.1	77.0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	68.0	71.2	73.8	76.7	78.2	80.2	79.8	80.5	82.1	82.5	81.9	83.1
	17	61.8	72.6	73.7	74.9	75.9	72.5	72.7	71.1	73.9	71.3	70.3	71.1
	18	56.3	57.3	59.1	61.5	63.1	63.7	65.7	66.3	67.3	67.7	64.9	69.7
	19	46.0	50.1	55.4	57.7	61.3	61.5	63.0	61.1	61.4	66.3	65.2	67.1
	20	51.2	59.1	61.3	66.0	68.7	67.1	70.5	70.7	70.5	72.9	69.1	69.5
	21	51.9	57.2	59.8	61.4	66.8	68.5	70.5	71.5	73.0	73.5	73.5	73.9
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	53.5	59.0	61.5	65.2	63.5	61.4	66.1	66.5	67.5	68.3	68.1	67.8
	24	52.8	57.3	60.5	61.4	67.0	69.3	70.5	70.0	70.1	70.4	70.6	70.6
	25	53.8	57.1	65.5	68.7	70.3	69.7	70.5	69.9	70.7	71.1	69.5	68.1
	26	53.4	58.3	63.1	67.2	68.7	71.7	71.2	73.9	74.0	74.7	74.8	70.9
	27	56.2	56.8	58.9	60.3	61.7	63.6	61.9	66.0	65.3	63.9	64.6	65.5
	28	47.5	51.0	62.0	63.8	65.1	67.8	68.1	68.3	69.0	68.1	68.3	68.7
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	58.7	61.5	65.8	69.6	71.5	72.7	73.0	73.3	72.5	70.7	68.5	69.4
	31	50.6	51.1	56.5	57.5	58.7	59.6	60.7	61.7	61.7	62.7	61.6	60.1
	Hourly Means	57.75	61.50	65.41	67.85	69.50	70.41	71.35	71.81	72.10	72.05	71.26	70.23

STANDARD THERMOMETER.

9	10	11
3	4	5
75.4	75.7	74.9
78.9	79.3	79.0
81.2	81.5	79.7
80.9	78.2	70.5
76.6	78.7	75.2
81.1	81.3	79.9
78.0	77.6	77.9
79.6	77.2	77.0
80.6	80.5	77.5
82.1	83.2	79.4
77.8	77.1	74.3
71.5	70.7	70.2
76.7	75.4	73.0
82.1	80.0	77.8
75.3	76.8	78.2
85.1	86.1	83.5
80.7	76.3	76.7
79.1	80.3	78.2
78.9	78.2	78.5
72.7	71.5	73.3
69.9	69.5	68.2
61.7	62.7	63.2
63.3	65.0	61.8
65.2	65.5	65.0
69.0	69.1	68.1
65.3	66.1	69.5
68.7	70.5	67.1
75.16	75.11	74.05
72.5	72.3	69.5
72.1	73.2	71.1
75.9	76.9	76.3
71.5	73.1	71.3
76.7	75.1	70.3
71.3	79.2	68.9
71.6	73.7	73.3
76.0	75.1	74.3
67.3	69.1	69.9
75.1	72.3	73.9
71.3	71.2	70.3
78.9	76.1	77.0
82.5	81.9	83.1
71.3	70.3	71.1
67.7	61.9	69.7
66.3	65.2	67.4
72.9	69.1	69.7
73.5	73.5	73.9
68.3	68.1	67.8
70.4	70.6	70.6
71.1	69.5	68.1
74.7	74.8	70.9
63.9	64.6	63.5
68.1	68.3	68.7
70.7	68.1	69.4
62.7	61.6	60.4
72.05	71.26	70.24

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
74.7	69.5	63.7	60.7	59.1	59.8	60.1	58.6	59.6	58.1	55.9	54.0	65.99
76.5	70.9	66.7	61.6	63.9	62.0	59.0	58.3	56.9	56.3	55.1	55.2	68.04
78.3	72.5	66.9	62.8	60.1	60.0	—	—	—	—	—	—	69.87
71.0	70.5	68.3	67.8	67.3	68.9	68.9	59.7	59.1	57.5	57.1	56.7	69.77
72.2	71.1	67.2	65.1	63.7	63.5	61.4	62.8	61.5	61.1	62.9	63.5	69.15
71.8	73.7	68.9	66.5	65.4	65.7	66.5	65.3	62.3	61.8	63.0	61.0	71.56
71.7	75.5	71.7	69.6	70.5	69.9	69.9	69.3	63.7	66.4	65.8	66.1	73.64
76.3	71.1	71.5	71.9	70.5	70.3	70.1	69.3	69.5	68.7	68.7	68.7	74.17
76.1	73.3	73.3	72.2	72.2	71.3	—	—	—	—	—	—	72.77
80.7	79.5	73.5	70.3	69.1	68.7	67.3	66.7	65.5	65.5	65.3	65.0	72.77
72.1	69.1	66.3	63.9	62.3	60.7	60.0	59.3	58.7	57.8	56.7	56.2	70.33
69.1	64.1	60.3	57.5	56.6	55.3	53.1	52.5	51.8	51.2	52.3	51.8	62.76
70.9	69.5	68.5	68.3	68.3	66.5	66.1	60.7	61.3	60.3	59.5	59.1	67.63
55.3	55.1	71.3	69.3	68.7	68.1	68.5	68.1	67.9	66.5	65.7	67.1	73.60
78.0	77.4	74.3	73.1	73.5	73.1	—	—	—	—	—	—	75.07
81.3	79.4	75.2	72.9	71.5	70.9	70.2	68.7	69.1	67.5	66.9	66.7	77.25
72.3	71.7	70.8	70.3	70.6	70.0	70.0	69.3	68.5	69.5	68.4	68.5	73.73
75.1	73.3	70.9	68.9	67.7	65.7	67.3	66.3	65.8	69.7	68.7	68.5	72.72
76.2	71.1	67.2	62.9	60.7	58.3	54.8	52.8	52.0	51.0	48.7	48.3	67.14
73.3	68.3	63.3	59.5	57.7	57.3	55.9	55.8	55.4	54.4	53.6	53.8	63.72
67.5	66.3	65.1	65.5	66.1	66.3	—	—	—	—	—	—	66.29
60.3	58.3	54.9	52.6	48.7	47.5	65.6	68.4	69.5	67.7	61.5	59.2	54.29
61.1	60.4	51.7	51.8	51.2	48.9	47.3	47.1	46.7	46.3	43.8	47.1	56.13
62.5	60.9	57.7	51.0	53.2	52.2	52.2	52.6	52.6	51.3	49.5	48.7	58.47
68.1	67.6	67.0	63.7	62.9	61.9	60.7	59.5	58.9	55.8	55.3	51.9	64.25
65.5	60.1	60.1	59.4	57.9	57.1	55.8	53.1	52.8	50.1	48.7	48.3	59.42
63.7	61.3	61.3	58.1	56.2	54.5	—	—	—	—	—	—	61.03
—	—	—	—	—	—	56.0	55.4	54.4	52.0	51.2	50.1	—
72.59	69.81	66.69	61.56	61.51	62.80	62.14	61.18	60.63	59.69	58.91	58.93	67.98
72.3	67.3	61.9	60.7	60.3	58.1	57.1	53.2	52.6	52.8	49.7	48.5	62.78
73.7	69.7	62.4	58.1	55.1	54.4	55.1	51.2	52.8	52.4	51.4	52.0	63.20
75.1	71.7	61.0	59.9	58.6	57.9	58.1	59.5	56.2	56.5	55.9	56.9	66.21
69.1	67.1	61.8	63.1	61.1	63.3	63.3	63.6	62.7	62.4	61.8	60.9	67.32
63.9	61.7	67.0	66.7	67.0	66.9	66.8	65.8	61.4	61.1	58.7	57.5	68.97
67.5	64.6	63.3	62.3	62.3	61.7	—	—	—	—	—	—	65.65
72.3	70.0	68.3	68.5	68.3	66.7	62.3	62.3	62.3	62.1	61.7	62.5	67.83
70.5	69.7	69.1	68.5	67.9	67.7	65.1	61.4	63.3	62.5	62.7	63.7	67.83
70.9	66.7	64.6	62.1	61.1	60.6	67.3	65.1	65.3	65.0	65.5	66.1	70.24
72.3	68.7	67.9	66.9	66.8	66.5	59.7	59.3	59.0	59.5	57.8	57.3	65.49
72.7	70.5	69.3	69.1	67.3	66.9	66.3	66.1	65.3	62.5	62.7	62.3	68.31
73.0	73.7	70.3	68.7	67.5	67.0	66.1	68.1	67.3	67.0	66.3	66.5	70.96
—	—	—	—	—	—	—	—	—	—	—	—	71.33
80.9	75.7	71.5	69.3	67.1	66.3	66.1	65.5	65.2	64.0	63.7	61.0	61.0
68.9	67.9	66.3	65.7	62.6	61.7	63.5	61.8	61.7	61.4	61.6	63.0	73.16
29.3	26.3	54.6	52.2	51.6	49.6	59.6	56.8	55.1	56.4	58.5	56.5	66.70
64.8	60.3	56.5	55.9	55.7	55.6	48.6	48.3	48.3	48.3	48.1	45.0	56.83
60.1	58.7	58.7	58.3	57.1	55.2	56.0	54.2	52.4	50.4	51.4	51.8	57.73
71.5	66.5	59.5	58.3	57.5	55.4	55.1	54.0	54.0	53.4	53.0	53.0	60.90
—	—	—	—	—	—	—	—	—	—	—	—	62.00
66.3	60.5	56.9	56.2	54.2	53.1	51.1	53.0	51.8	51.4	50.6	50.8	59.53
69.1	61.7	58.9	57.6	56.1	55.1	52.0	52.1	52.8	52.3	49.6	49.3	61.47
66.4	62.2	58.5	57.5	56.9	56.3	55.1	51.6	51.4	54.2	52.8	52.6	61.47
69.3	66.1	65.2	65.1	66.5	66.3	61.0	62.9	63.3	61.7	60.3	51.9	61.96
65.5	59.0	58.5	56.5	54.6	53.1	53.2	52.4	49.5	47.3	48.0	48.8	66.23
65.5	60.0	58.7	56.5	56.4	55.0	—	—	—	—	—	—	58.09
—	—	—	—	—	—	59.0	57.5	56.0	55.5	55.6	55.1	60.95
63.8	62.0	59.1	60.1	59.4	58.1	56.6	56.2	55.4	49.9	49.5	48.5	62.78
58.9	51.7	51.3	49.3	48.5	48.3	47.7	47.5	45.5	48.1	49.1	50.1	54.36
68.08	65.23	62.59	61.28	60.37	59.49	59.08	58.22	57.45	56.72	56.25	55.85	64.27



STANDARD THERMOMETER.													
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
SEPTEMBER.	1	51.4	52.8	56.4	59.2	62.3	64.1	63.9	65.9	66.4	66.3	66.0	65.4
	2	49.3	55.2	60.9	61.8	67.5	68.7	69.4	70.1	72.1	71.9	72.1	69.5
	3	57.4	62.4	64.1	64.2	70.4	73.1	73.7	70.9	74.8	73.5	70.6	65.5
	4	56.0	56.1	56.1	56.3	57.1	57.7	57.3	57.8	57.7	58.3	58.5	58.9
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	49.2	51.8	56.2	62.3	63.3	63.5	63.3	65.3	65.9	67.7	65.8	65.1
	7	52.6	59.6	63.7	64.9	65.2	65.3	64.6	65.1	65.0	64.3	63.1	62.7
	8	65.0	66.1	68.4	69.6	73.0	74.6	74.8	73.5	73.8	72.9	72.5	70.8
	9	50.1	50.1	51.1	52.7	55.8	56.8	58.2	60.5	60.3	60.1	60.2	59.0
	10	45.3	49.7	55.8	60.3	61.7	62.2	63.5	63.5	64.0	63.7	65.3	63.0
	11	46.8	52.0	56.1	61.5	61.5	63.1	62.2	62.1	61.9	61.6	60.9	60.3
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	51.6	53.9	53.2	54.8	54.8	54.8	55.0	55.5	53.8	52.2	50.9	49.2
	14	45.0	45.7	46.7	47.4	48.7	48.4	49.4	50.0	53.0	53.3	52.9	51.8
	15	38.1	42.9	46.3	50.1	52.0	51.2	55.6	57.1	57.0	57.3	57.9	57.9
	16	38.1	43.3	50.8	53.4	57.7	58.3	58.7	58.3	59.0	59.5	59.7	58.3
	17	50.4	51.4	56.5	60.0	61.5	62.5	62.1	62.0	61.1	61.3	61.0	60.0
	18	57.3	58.1	59.4	59.8	61.1	60.7	61.3	61.5	60.5	61.0	61.0	60.1
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	51.8	55.1	56.3	56.5	57.1	56.8	57.0	57.0	56.7	56.5	56.6	57.1
	21	51.4	53.7	56.3	58.3	59.9	60.1	62.5	61.7	62.7	61.7	59.7	58.3
	22	41.8	48.3	52.5	56.2	59.2	59.5	59.4	58.7	59.5	59.3	60.1	58.7
	23	49.9	52.8	58.7	61.5	62.9	65.0	65.5	66.1	67.3	67.1	66.7	66.0
	24	51.6	51.0	51.0	54.4	54.4	54.6	56.0	55.8	55.8	55.6	55.7	55.3
	25	49.0	48.9	50.0	53.1	55.1	56.7	59.1	58.1	57.2	56.2	55.5	55.5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	58.0	59.2	60.1	60.6	62.3	61.1	66.3	67.5	68.3	68.7	69.1	67.1
	28	46.7	49.3	53.0	54.9	57.5	59.5	60.3	52.2	55.0	54.4	52.2	51.3
	29	43.6	41.4	48.3	51.4	54.2	50.4	54.2	55.4	48.7	46.6	48.2	48.5
	30	39.6	41.9	45.0	48.0	52.8	53.2	51.7	51.8	52.2	52.0	53.0	51.6
Hourly Means	49.96	52.27	55.23	57.58	59.58	60.30	61.08	61.02	61.07	60.85	60.51	59.20	
OCTOBER.	1	41.4	46.3	48.9	50.0	50.9	52.7	52.8	53.7	52.8	54.0	51.0	52.2
	2	39.3	41.9	46.9	51.5	53.5	54.8	54.6	55.0	56.2	56.3	55.0	52.8
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	40.7	41.0	51.5	56.7	58.1	59.5	60.5	59.4	59.3	58.1	58.0	56.9
	5	57.3	58.3	58.8	60.7	59.5	60.1	63.7	63.2	63.9	65.0	62.3	60.5
	6	57.3	57.2	57.0	56.9	56.7	56.9	57.5	57.3	58.0	58.7	58.5	58.7
	7	55.5	51.8	55.0	55.0	56.2	55.6	55.0	55.5	55.6	55.8	56.0	56.0
	8	55.6	55.5	55.7	56.2	57.5	58.5	59.0	56.8	56.7	56.3	56.8	57.9
	9	40.8	44.2	47.1	51.9	54.2	53.8	53.6	51.0	56.5	56.5	56.5	55.6
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	39.4	39.6	41.7	41.4	46.5	47.8	49.5	49.5	50.6	51.0	50.7	48.1
	12	41.4	42.4	43.8	45.0	46.7	47.8	45.3	45.3	44.0	44.2	43.9	44.0
	13	28.6	39.1	41.3	41.7	43.0	43.9	46.5	47.3	47.1	46.0	44.1	43.4
	14	35.0	35.4	35.6	39.1	41.0	40.3	41.0	40.0	40.8	41.0	40.2	38.9
	15	29.7	30.6	33.7	35.3	37.6	41.5	41.9	41.6	43.2	42.6	41.7	39.8
	16	42.8	41.3	46.1	47.9	49.9	51.2	52.7	51.5	55.1	55.7	51.5	53.2
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	39.1	42.1	45.3	49.8	51.0	56.3	60.3	61.7	61.5	61.0	60.5	58.7
	19	41.9	41.1	44.3	48.5	49.5	51.6	53.6	52.4	51.5	53.5	52.8	50.1
	20	29.9	31.9	37.8	44.4	47.3	49.5	49.9	51.4	54.0	54.4	52.8	48.5
	21	51.5	35.9	38.1	41.5	44.0	44.9	44.7	44.1	44.0	43.9	44.0	43.4
	22	38.1	38.2	38.1	37.9	38.7	39.2	38.9	39.1	40.0	40.4	41.0	40.6
	23	35.3	35.1	37.2	41.6	46.0	48.0	49.3	48.9	49.1	49.1	48.9	46.1
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	46.3	46.3	46.6	48.3	47.9	48.7	48.4	48.2	45.2	42.6	39.6	37.3
	26	29.1	30.2	31.8	31.6	31.9	31.3	32.1	31.0	30.9	30.7	29.7	27.5
	27	21.9	21.7	24.8	29.0	30.8	32.0	33.7	35.8	36.2	35.7	34.7	33.5
	28	25.3	27.0	32.4	35.3	39.1	41.0	41.0	41.0	41.1	40.8	40.1	38.6
	29	28.6	32.7	31.5	41.0	45.2	47.3	48.0	49.0	49.2	48.9	48.1	44.6
	30	31.1	33.9	36.4	43.7	47.3	50.5	50.4	51.3	50.2	50.1	49.3	46.3
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	39.30	40.37	42.67	45.57	47.43	48.61	49.39	49.54	49.86	49.70	49.00	47.44	

9	10	11
3	4	5
66.3	66.0	65.4
71.9	72.1	69.5
73.5	70.6	65.5
78.4	58.5	58.9
67.7	65.8	65.1
63.3	63.1	62.7
72.9	72.5	70.8
60.1	60.2	59.0
63.7	65.3	63.0
61.6	60.9	60.3
52.2	50.9	49.2
53.3	52.9	51.8
57.3	57.9	57.9
59.5	59.7	58.3
61.3	61.0	60.0
61.0	61.0	60.1
56.5	56.6	57.1
61.7	59.7	58.3
59.3	60.1	58.7
67.1	66.7	66.0
55.6	55.7	55.2
56.2	55.5	55.5
68.7	69.1	67.1
54.4	52.2	51.1
16.6	48.2	48.5
52.0	53.0	51.6
60.85	60.51	59.20
51.0	51.0	52.2
56.3	55.0	52.8
58.1	58.0	56.9
65.0	62.3	60.5
58.7	58.5	58.7
55.8	56.0	56.0
56.3	56.8	57.9
56.5	56.5	55.6
51.0	50.7	48.1
41.2	43.9	41.0
46.0	44.1	43.1
41.0	40.2	38.9
42.6	41.7	39.8
55.7	51.5	53.2
51.0	60.5	58.7
53.5	52.8	50.1
44.4	52.8	48.5
43.9	44.0	43.1
40.1	41.0	40.6
40.1	48.9	46.1
2.6	39.6	37.3
0.7	29.7	27.5
5.7	31.7	33.5
0.8	40.1	38.6
8.9	48.1	41.6
0.1	49.3	46.3
9.70	49.00	47.14

STANDARD THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
63.9	58.4	56.3	51.9	51.1	53.9	53.1	52.0	51.1	51.4	51.1	49.7	37.93	
68.1	65.2	65.2	61.1	61.7	59.5	58.3	56.7	56.2	54.4	55.6	55.4	63.00	
62.3	60.0	59.1	58.9	58.2	56.3	55.9	55.8	56.7	56.7	56.3	56.2	63.04	
39.3	59.7	60.3	60.6	60.6	59.5	—	—	—	—	—	—	55.77	
63.6	60.0	57.7	57.2	56.8	55.0	49.8	48.7	48.3	48.1	47.7	48.1	58.59	
61.3	62.2	61.3	63.1	61.1	63.0	63.3	63.9	63.5	63.6	63.9	64.1	62.93	
68.0	66.5	66.1	65.7	58.3	55.2	55.2	54.0	54.0	53.6	51.8	49.5	64.70	
58.9	57.2	56.5	53.2	50.1	48.0	45.7	44.4	44.5	43.9	43.6	43.3	52.68	
69.6	53.7	51.4	50.6	49.5	48.9	48.6	48.4	47.7	46.7	46.3	46.5	54.79	
59.0	52.6	51.0	50.8	50.4	50.1	—	—	—	—	—	—	56.43	
—	—	—	—	—	—	56.3	55.6	54.6	54.4	51.2	55.4	—	
48.1	47.1	46.4	45.5	45.2	44.6	44.6	44.6	44.4	44.4	44.1	44.6	49.42	
51.2	46.1	44.6	43.2	43.6	42.4	41.9	40.1	39.5	38.1	39.1	38.6	45.86	
53.0	49.5	48.3	49.2	48.3	47.1	45.8	43.2	40.9	39.7	38.9	38.5	48.78	
53.3	50.8	49.0	47.8	48.5	49.5	49.5	49.3	49.3	48.7	49.3	50.1	52.18	
58.8	58.7	58.5	58.3	55.8	55.4	54.6	58.3	58.3	58.1	57.5	57.5	58.32	
39.3	69.1	39.8	59.1	58.9	59.3	—	—	—	—	—	—	58.70	
—	—	—	—	—	—	55.4	55.1	55.2	54.8	54.8	54.8	—	
55.6	53.0	53.6	53.2	52.8	52.0	52.0	51.4	51.0	52.3	51.1	52.7	54.81	
55.0	51.6	49.9	49.3	48.4	48.3	46.7	44.6	43.6	44.7	44.9	44.4	53.24	
53.8	51.9	50.1	49.2	50.6	48.9	47.3	46.1	45.9	45.5	45.5	45.7	52.36	
62.5	61.4	59.5	58.1	56.9	56.3	58.3	57.1	56.5	56.0	55.2	54.6	60.07	
51.8	54.4	54.6	55.0	54.4	53.4	53.1	52.8	52.1	50.6	49.5	48.8	53.89	
51.8	51.6	51.1	53.6	53.4	53.1	—	—	—	—	—	—	53.20	
—	—	—	—	—	—	56.5	57.3	58.1	58.3	58.3	57.9	—	
61.6	62.3	62.3	60.9	58.7	56.3	52.8	49.7	48.6	46.7	46.9	46.3	59.48	
49.8	48.7	46.7	44.9	44.8	33.0	42.4	41.7	41.5	43.0	43.4	43.9	49.16	
47.7	47.4	46.2	44.8	44.1	45.3	45.3	43.4	40.4	41.5	38.5	39.6	46.59	
51.0	45.9	45.2	45.2	46.1	47.7	49.1	50.0	49.9	48.7	48.1	45.9	48.85	
57.77	55.32	54.36	53.71	52.87	52.01	51.47	50.77	50.25	49.84	49.62	49.38	55.26	
48.1	43.1	42.4	39.8	40.4	40.8	39.8	37.9	38.5	40.0	39.6	39.6	45.96	
48.3	45.7	45.3	45.6	46.7	44.3	—	—	—	—	—	—	48.30	
56.2	56.2	55.8	55.8	54.0	53.9	51.5	51.1	53.3	51.2	51.2	51.2	55.05	
59.5	59.0	58.5	58.3	57.5	57.1	57.3	57.2	57.3	57.2	57.2	57.1	59.14	
58.5	58.3	57.3	59.9	57.4	56.6	56.6	56.1	55.8	55.6	55.4	55.5	57.10	
56.2	56.5	55.7	55.8	55.8	56.1	56.1	56.2	55.8	55.8	55.8	55.8	55.76	
57.5	57.3	56.6	52.8	51.5	50.4	48.1	47.3	49.3	44.5	42.5	42.1	53.25	
39.1	52.9	51.1	51.4	53.6	53.0	—	—	—	—	—	—	49.70	
—	—	—	—	—	—	42.3	41.5	40.6	41.0	41.0	40.2	—	
46.7	43.4	43.0	41.2	40.1	37.9	37.7	37.7	38.4	38.7	40.0	41.5	45.64	
44.0	43.6	43.2	42.8	42.1	43.0	42.8	41.2	40.3	39.6	39.5	38.6	43.53	
40.3	39.5	37.2	35.3	34.1	32.9	32.2	33.7	34.1	34.7	35.1	35.5	39.45	
56.1	33.1	31.6	30.3	29.0	28.8	27.5	27.4	27.7	28.6	29.0	29.0	34.43	
39.3	41.5	40.9	40.3	41.8	42.8	42.8	42.1	41.4	41.3	41.3	43.4	40.31	
53.8	53.2	52.6	52.2	52.0	51.8	—	—	—	—	—	—	48.16	
59.1	57.2	56.3	57.9	54.0	52.2	51.2	50.1	48.9	47.1	43.1	42.2	52.91	
46.1	44.8	43.8	49.8	38.9	34.3	33.5	32.1	31.1	30.9	31.0	30.8	43.00	
45.3	43.4	43.0	40.6	39.6	36.6	32.9	31.4	30.6	31.2	31.0	33.9	41.32	
43.2	43.2	42.6	42.5	42.5	39.8	39.0	38.7	38.3	38.3	38.1	38.3	41.15	
40.3	39.9	39.8	39.5	38.9	39.1	39.3	37.5	35.2	34.3	34.8	36.5	38.57	
45.3	40.2	40.2	38.6	38.3	38.9	—	—	—	—	—	—	43.98	
—	—	—	—	—	—	46.7	46.7	46.7	46.5	46.5	46.3	—	
35.3	34.5	34.5	32.2	32.2	31.8	31.2	31.0	30.8	30.3	28.8	28.2	38.59	
26.5	25.7	24.6	23.8	22.7	21.7	21.1	20.2	20.6	20.6	20.9	20.8	26.57	
31.7	32.0	31.6	31.5	31.8	28.8	28.2	27.8	27.6	28.2	28.0	27.1	30.96	
37.9	37.0	35.7	34.1	29.9	29.5	29.5	30.0	28.8	28.8	28.3	29.0	34.13	
43.4	41.5	41.1	37.1	38.5	35.0	34.6	33.9	33.1	32.9	33.1	33.3	39.79	
44.8	45.2	44.4	38.7	36.6	35.9	—	—	—	—	—	—	44.75	
—	—	—	—	—	—	48.9	48.8	47.7	48.1	47.7	47.8	—	
45.98	44.93	44.20	45.27	42.33	41.25	40.77	40.23	39.82	39.75	39.46	39.56	44.27	

STANDARD THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
NOVEMBER.	1	47.7	48.2	49.4	50.6	52.6	53.6	55.2	55.2	54.4	53.2	51.9	49.7
	2	49.7	49.7	50.8	52.3	54.0	55.8	56.3	58.2	56.1	55.8	54.8	52.0
	3	46.0	46.2	53.4	51.0	53.2	53.0	51.4	54.3	51.8	51.0	53.8	53.0
	4	41.9	41.5	45.1	48.9	49.3	51.5	51.4	51.1	51.0	48.8	49.6	46.1
	5	35.7	35.6	38.6	40.5	42.9	43.6	44.6	46.2	44.6	45.0	43.1	41.2
	6	31.8	29.7	32.4	35.5	36.7	37.7	37.5	37.2	37.3	38.3	38.7	36.1
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	45.2	45.5	46.0	46.6	46.0	46.3	46.9	48.3	48.0	48.3	48.5	48.3
	9	50.8	51.0	53.2	53.6	55.6	54.1	52.6	51.2	51.8	52.1	51.8	47.4
	10	37.3	37.5	38.1	38.5	38.3	39.6	39.9	40.1	39.8	39.6	39.0	38.3
	11	35.7	35.9	36.3	36.7	37.0	37.2	37.7	37.9	37.9	37.7	37.5	36.7
	12	31.8	30.8	32.3	36.5	38.3	39.3	39.2	39.8	39.5	40.0	38.9	37.9
	13	34.4	34.0	34.7	37.4	38.6	39.6	40.4	41.0	40.8	40.0	39.2	39.1
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	38.2	38.7	38.9	40.0	41.3	41.5	40.0	40.6	41.2	41.3	40.7	40.6
	16	28.4	27.4	30.6	36.3	39.5	41.0	43.3	44.4	46.5	46.9	46.3	45.7
	17	46.0	46.1	45.9	46.6	48.7	50.6	52.4	50.6	49.5	52.0	51.7	49.3
	18	42.4	41.9	41.9	42.2	42.6	42.8	42.6	42.6	43.0	43.7	45.2	45.5
	19	33.8	33.6	31.4	30.8	29.9	28.8	28.4	28.4	29.6	28.6	28.2	27.6
	20	18.8	18.6	20.0	23.6	26.3	27.8	28.8	29.5	30.2	30.0	29.2	27.9
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	35.4	35.9	36.1	38.4	40.8	43.7	45.3	46.5	45.8	45.2	43.3	41.5
	23	42.0	42.3	42.6	43.9	45.5	47.6	50.0	51.2	50.8	51.3	51.6	52.4
	24	47.5	45.4	45.7	45.9	47.9	49.5	50.0	50.0	49.8	48.1	47.5	47.1
	25	40.4	40.4	39.3	41.9	42.4	42.4	41.4	40.3	39.3	39.1	38.9	37.7
	26	26.2	25.5	25.7	25.7	25.7	25.9	25.9	26.3	26.3	26.5	25.9	25.1
	27	21.6	25.4	26.5	27.5	26.7	27.8	27.8	30.8	31.6	31.2	29.9	30.1
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	9.6	9.3	9.8	10.1	11.2	13.4	13.4	13.7	14.3	15.4	15.4	13.1
	30	18.6	18.2	21.1	22.6	23.7	24.6	25.1	25.7	26.5	26.8	25.7	24.4
	Hourly Means	36.15	35.93	37.15	38.72	39.80	40.72	41.17	41.58	41.55	41.50	41.01	39.72
DECEMBER.	1	31.8	33.3	36.1	37.2	37.9	38.9	40.6	40.2	40.6	42.2	38.8	38.1
	2	35.0	34.5	34.1	35.9	36.9	37.7	38.7	38.7	38.6	38.3	37.2	35.0
	3	33.1	33.6	33.5	33.6	33.7	34.2	34.1	33.8	32.3	32.0	31.3	30.6
	4	25.9	25.7	25.7	27.5	27.8	29.7	30.0	30.0	30.3	31.1	31.0	30.9
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	26.9	26.5	27.6	29.5	31.2	30.2	31.4	32.0	33.7	32.7	32.7	29.9
	7	32.7	32.7	31.6	36.1	37.7	38.1	39.1	39.5	40.0	39.8	38.1	35.2
	8	36.3	36.1	37.4	39.6	42.1	41.1	45.3	45.8	44.5	41.7	41.6	43.9
	9	37.6	37.1	36.5	36.1	36.5	37.5	38.2	38.5	39.7	41.6	42.3	42.9
	10	47.1	45.7	45.8	45.7	47.2	47.1	49.5	49.9	49.5	45.9	44.7	44.0
	11	33.4	33.9	31.7	35.1	36.1	36.5	36.1	37.1	37.4	37.6	36.2	33.7
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	37.0	36.9	36.1	36.1	36.1	36.1	36.7	36.3	34.6	33.5	33.7	33.3
	14	32.0	32.0	32.2	32.7	33.1	33.2	33.5	33.3	33.1	33.0	32.9	32.7
	15	31.1	32.4	29.9	30.1	31.0	31.6	32.3	32.8	32.7	32.7	31.8	29.7
	16	13.2	13.2	13.8	13.8	15.0	15.8	17.2	18.1	19.4	19.8	20.0	21.2
	17	16.4	17.5	18.2	19.2	21.2	21.5	24.0	25.9	27.1	27.5	27.6	26.1
	18	13.2	13.7	14.6	18.1	22.5	24.8	27.0	29.9	31.3	31.4	32.4	33.1
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	13.7	13.7	13.2	12.1	12.8	13.1	14.1	15.0	15.1	15.7	14.1	14.0
	21	10.4	9.9	9.5	10.3	13.0	16.1	17.2	18.2	18.7	20.2	21.3	21.5
	22	21.1	20.8	20.6	21.3	22.3	23.1	24.0	23.9	24.6	24.9	25.0	24.4
	23	17.7	17.7	19.9	19.4	20.2	21.9	23.6	24.0	24.0	24.4	24.6	24.4
	24	21.3	20.6	20.1	22.3	22.0	24.3	24.7	24.6	22.1	22.1	21.5	20.9
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	13.0	12.0	10.7	12.1	15.7	17.3	18.8	18.2	19.1	19.8	19.4	19.8
	28	30.3	30.9	31.4	33.0	34.1	34.1	34.4	34.5	34.1	34.7	34.7	34.5
	29	37.2	38.0	38.3	39.5	41.7	41.7	43.4	42.4	42.2	42.1	42.4	41.9
	30	41.7	40.6	41.0	43.0	43.3	44.1	45.2	46.2	45.5	44.2	44.2	43.2
	31	42.4	41.7	41.9	42.4	43.9	45.1	45.1	44.9	44.9	44.2	44.0	43.6
Hourly Means	28.27	28.10	28.27	29.31	30.58	31.11	32.35	32.72	32.89	32.93	32.56	31.76	

Christmas Day.

STANDARD THERMOMETER.

9	10	11
3	4	5
53.2	51.9	49.7
55.8	54.8	52.0
51.0	53.8	50.0
48.8	49.6	46.1
45.0	43.1	41.2
38.3	38.7	36.1
—	—	—
48.3	48.5	48.3
52.1	51.8	47.4
39.6	39.0	38.3
37.7	37.5	36.7
40.0	38.9	37.9
40.0	39.2	39.1
—	—	—
41.3	40.7	40.0
46.9	46.3	45.7
52.0	51.7	49.3
43.7	45.2	45.5
28.6	28.2	27.6
30.0	29.2	27.9
—	—	—
45.2	43.3	41.5
51.3	51.6	50.1
48.1	47.5	47.1
39.1	38.9	37.7
26.5	25.9	25.1
31.2	29.9	30.1
—	—	—
15.4	15.4	13.1
26.8	25.7	24.1
—	—	—
41.50	41.01	39.72
—	—	—
42.2	38.8	38.1
38.3	37.2	35.6
32.0	31.4	30.6
31.1	31.0	30.9
—	—	—
32.7	32.7	29.9
39.8	38.1	35.2
41.7	41.6	43.9
41.6	42.3	42.9
45.9	44.7	44.0
37.6	36.2	33.7
—	—	—
33.5	33.7	33.3
33.0	32.9	32.7
32.7	31.8	29.7
19.8	20.0	21.2
27.5	27.6	26.1
31.4	32.4	33.1
—	—	—
15.7	14.1	11.0
20.2	21.3	21.5
21.9	25.0	21.4
21.4	21.6	21.4
22.1	21.5	20.9
—	—	—
19.8	19.1	19.8
31.7	31.7	31.7
42.1	42.4	41.9
41.2	41.2	43.2
41.2	41.0	43.6
—	—	—
32.93	32.56	31.76

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
46.8	48.3	49.3	50.1	49.3	49.5	49.7	50.9	49.5	49.4	49.5	49.5	50.56
50.6	49.4	50.4	52.6	51.6	50.2	49.9	49.7	49.7	49.3	47.4	47.1	51.81
53.8	52.5	52.5	52.8	52.6	50.0	49.1	49.3	46.1	41.8	42.8	41.3	50.74
43.0	41.5	42.4	38.5	41.1	41.9	40.0	37.5	35.7	31.9	35.1	36.3	43.46
38.5	37.1	36.1	35.3	36.1	36.3	35.3	31.5	33.8	33.1	32.7	32.2	38.44
32.9	30.3	29.3	29.7	29.7	—	—	—	—	—	—	—	36.51
—	—	—	—	—	—	43.7	43.6	41.2	41.6	41.8	45.0	—
48.3	48.3	48.5	48.1	48.0	48.2	49.3	49.1	49.1	50.8	50.6	51.8	48.08
46.5	41.7	41.3	43.8	42.8	42.1	42.1	38.7	37.3	37.5	37.6	38.1	46.45
37.7	37.3	36.9	37.2	36.7	35.7	35.9	35.9	35.7	35.5	35.5	35.5	37.56
36.4	36.0	35.7	35.5	35.5	35.5	35.5	31.9	31.7	31.1	33.5	33.0	36.02
37.5	36.9	36.5	35.7	35.7	35.7	35.7	36.1	36.9	37.3	37.0	36.6	36.75
39.6	40.0	40.0	40.0	40.2	38.9	—	—	—	—	—	—	38.46
—	—	—	—	—	—	37.8	37.7	37.7	37.3	36.7	37.9	—
38.9	37.4	36.9	35.6	35.5	35.5	33.7	33.7	32.4	30.1	30.6	29.2	37.00
45.2	45.7	45.5	45.2	45.2	45.0	45.9	45.9	45.7	46.7	45.3	45.9	42.77
47.7	47.3	47.6	46.3	46.1	46.3	46.3	45.9	—	41.2	41.0	43.1	47.48
43.4	45.3	45.3	49.9	48.1	46.3	45.3	43.3	41.8	40.4	37.3	36.1	43.25
27.6	26.7	26.1	25.6	21.9	23.8	22.8	21.7	21.5	20.2	20.0	19.0	26.63
29.1	30.7	31.8	31.4	31.1	30.6	—	—	—	—	—	—	29.25
—	—	—	—	—	—	33.1	33.1	31.1	35.4	35.6	35.6	—
40.4	40.3	40.4	41.0	41.5	41.5	42.1	41.9	42.2	42.6	42.2	41.7	41.49
51.4	51.8	51.2	51.2	51.8	50.8	49.7	49.1	48.3	49.7	49.1	49.4	48.95
45.8	44.3	43.3	42.4	42.3	42.1	41.9	41.5	41.1	40.9	40.7	40.8	45.06
37.7	37.3	36.0	36.0	35.1	33.9	32.9	31.6	31.2	30.6	28.4	27.1	36.72
23.7	22.6	22.5	21.7	21.3	20.4	19.6	20.5	21.5	22.1	22.5	25.0	23.86
30.1	30.1	29.9	31.1	30.6	30.0	—	—	—	—	—	—	24.02
—	—	—	—	—	—	10.1	10.2	9.2	8.8	8.1	7.8	—
12.1	11.6	11.6	12.1	12.6	11.3	15.2	17.1	17.2	16.2	18.1	18.3	13.57
23.8	25.1	26.3	27.5	29.5	30.1	30.4	30.0	26.1	23.6	21.2	21.2	25.16
—	—	—	—	—	—	—	—	—	—	—	—	—
38.86	38.29	38.20	38.22	38.20	37.85	37.43	37.07	36.46	36.15	35.75	35.67	38.46
—	—	—	—	—	—	—	—	—	—	—	—	—
37.5	35.9	36.1	35.7	31.8	36.1	36.7	36.7	36.0	35.7	35.7	35.1	36.99
35.1	35.1	35.6	35.3	31.9	33.7	32.9	33.6	33.5	33.9	33.8	33.5	35.52
29.9	29.2	29.0	28.8	28.8	28.1	27.6	26.9	27.1	26.7	26.3	26.1	30.48
31.1	31.7	32.5	33.7	33.9	33.7	—	—	—	—	—	—	29.17
—	—	—	—	—	—	26.3	26.5	26.8	26.4	25.5	26.4	—
28.4	31.8	30.4	28.9	33.1	32.7	32.7	32.3	32.8	32.9	33.0	32.9	31.09
32.7	32.2	31.4	31.8	33.1	31.8	32.4	32.2	33.3	33.1	31.9	35.9	31.82
42.9	41.9	41.6	41.7	41.5	42.6	42.1	41.0	40.4	39.8	38.1	41.70	—
35.0	43.7	43.7	41.8	41.3	47.1	46.5	46.9	45.3	41.8	45.0	46.2	41.95
42.1	41.2	41.2	40.2	39.3	38.7	38.4	37.9	36.5	35.3	34.2	33.3	42.48
29.9	28.1	27.1	27.9	27.2	28.3	—	—	—	—	—	—	34.63
—	—	—	—	—	—	39.6	39.2	39.0	38.7	39.0	38.7	—
33.1	33.1	31.4	31.8	30.8	31.0	30.7	30.6	30.6	31.2	31.1	31.8	33.50
32.9	32.9	32.9	32.7	32.4	32.4	32.1	33.4	33.3	33.5	33.7	33.9	32.92
28.8	26.9	25.7	23.0	20.6	19.4	17.7	16.6	15.2	11.1	13.0	12.6	25.61
21.5	21.5	20.7	20.4	20.6	20.0	18.8	17.7	16.1	15.2	15.0	16.4	17.68
25.5	21.6	21.6	23.0	21.1	18.9	18.4	16.5	14.5	11.0	14.8	14.5	20.94
31.9	33.7	31.3	33.7	31.9	33.5	—	—	—	—	—	—	24.93
—	—	—	—	—	—	18.1	18.3	18.0	17.7	16.4	16.2	—
10.6	9.7	9.0	10.5	10.7	10.9	10.9	10.1	9.9	10.0	9.7	8.9	11.87
21.5	23.2	23.1	23.7	23.8	21.2	21.4	21.8	21.0	23.2	22.1	21.5	19.42
21.3	19.6	19.6	18.1	18.6	19.0	17.7	17.3	17.3	17.2	17.5	17.5	20.72
21.2	21.2	21.2	21.2	21.5	21.2	22.9	23.2	23.9	21.4	23.8	22.9	22.85
20.8	20.4	20.0	19.2	18.5	18.2	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	18.55
—	—	—	—	—	—	9.9	10.1	10.7	12.0	11.3	13.1	—
19.6	19.1	19.0	21.5	22.7	21.5	25.0	26.1	26.0	27.0	28.1	29.2	20.18
34.7	35.3	35.3	36.1	35.4	35.5	36.1	36.3	37.0	36.5	36.7	37.1	34.72
41.2	40.4	39.8	38.8	38.7	38.6	40.0	40.3	41.0	41.7	42.3	42.3	40.69
42.8	43.2	43.2	42.1	42.0	41.6	41.5	41.6	41.6	41.2	40.6	42.0	42.74
43.2	42.4	42.1	41.9	43.4	43.2	41.0	41.6	45.1	45.7	45.8	46.1	43.83
—	—	—	—	—	—	—	—	—	—	—	—	—
31.10	30.84	30.54	30.38	30.25	30.32	29.40	29.34	29.07	28.94	28.95	28.91	30.38

STANDARD THERMOMETER.													
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	1	45.8	46.9	46.3	46.7	46.3	47.8	47.2	48.0	48.9	48.5	51.5	51.1
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	33.0	33.0	33.9	35.4	36.0	36.9	37.1	37.9	38.2	38.3	37.7	36.7
	4	34.7	33.8	31.9	30.3	30.1	28.9	27.6	27.1	26.6	25.6	23.9	21.5
	5	23.8	25.5	26.7	27.4	27.8	29.1	31.6	31.9	31.7	30.9	35.1	31.2
	6	11.8	10.9	10.0	10.0	10.7	12.0	12.0	11.0	13.2	13.9	13.8	13.0
	7	12.8	13.7	13.9	14.8	15.0	16.0	18.4	19.4	19.8	19.8	19.6	19.6
	8	30.3	31.2	31.0	30.8	31.1	32.0	32.3	33.1	31.1	32.7	32.1	30.6
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—11.3	—12.0	—11.8	—9.3	—6.9	—4.6	—2.5	—0.6	—0.2	—0.2	—0.1	—0.6
	11	8.8	9.2	15.0	16.9	17.8	19.8	20.0	21.7	22.5	22.5	21.7	21.0
	12	10.9	8.1	7.2	13.7	19.1	21.7	25.0	26.7	25.9	26.9	25.0	21.3
	13	33.3	33.7	33.1	35.2	35.9	35.9	35.6	36.9	37.1	37.2	36.9	36.6
	14	36.7	36.8	37.1	37.3	37.3	37.9	37.8	38.1	38.3	38.3	38.3	38.2
	15	39.8	39.6	41.1	41.2	42.4	43.2	44.4	44.1	44.6	47.3	47.1	43.8
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	31.5	31.3	25.9	24.8	23.1	21.0	21.3	25.0	25.7	26.5	25.3	24.8
	18	30.3	25.3	22.7	22.8	21.9	21.1	21.5	21.1	20.4	20.6	18.8	17.6
	19	5.0	5.0	5.7	9.2	13.2	14.6	17.4	18.1	19.8	21.3	21.9	21.1
	20	29.7	39.2	30.4	33.5	36.0	37.6	38.5	38.8	40.6	41.9	39.2	37.1
	21	38.3	38.0	38.0	40.6	43.2	45.2	45.3	44.4	41.9	38.2	34.2	32.6
	22	15.2	15.4	16.9	18.4	20.0	22.7	25.3	26.3	27.8	29.7	29.2	27.2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	21.9	20.6	21.1	20.7	20.5	30.6	31.2	31.0	32.7	32.7	32.3	30.8
	25	27.4	28.0	28.9	34.5	36.1	37.7	37.7	38.2	39.8	39.9	38.3	35.9
	26	38.0	37.7	37.9	38.2	38.2	48.0	48.3	38.5	39.3	39.6	39.8	40.0
	27	38.1	37.1	37.9	38.7	39.9	40.7	42.3	41.1	40.2	41.2	39.3	38.3
	28	31.0	31.7	31.8	31.1	31.8	31.5	35.1	35.5	35.5	35.1	33.3	33.1
	29	26.5	29.5	30.7	31.6	31.6	31.3	31.6	31.8	32.1	32.1	32.1	31.6
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	33.3	33.9	34.3	35.9	36.2	36.7	37.3	37.8	37.9	39.2	38.9	36.5
Hourly Means	26.02	25.90	26.06	27.53	28.69	29.67	30.7	31.19	31.45	31.73	31.00	29.6	
FEBRUARY.	1	27.1	27.4	28.0	29.1	30.2	30.2	28.9	27.6	28.6	29.2	29.0	26.9
	2	20.8	21.3	21.7	28.7	33.7	35.5	35.5	36.1	36.5	36.5	35.9	34.1
	3	28.6	27.4	27.1	31.8	35.7	38.1	39.3	41.0	41.1	40.8	39.1	36.4
	4	32.0	33.7	31.3	30.7	39.3	39.6	39.6	38.7	37.5	37.4	37.5	37.2
	5	28.8	28.0	27.1	27.1	27.9	28.4	28.3	27.8	28.1	28.0	27.6	26.1
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	22.7	21.7	21.6	21.7	22.9	23.6	24.9	25.3	26.7	26.9	26.9	26.1
	8	18.9	19.5	20.2	21.7	23.2	24.0	25.4	26.9	28.2	27.8	26.9	26.1
	9	22.3	22.5	25.5	25.5	29.6	31.6	33.7	33.5	34.9	34.5	34.5	33.7
	10	21.1	18.7	16.5	13.3	13.9	14.3	15.1	16.0	16.9	16.6	16.0	14.5
	11	0.4	0.6	1.0	3.2	5.1	8.2	10.6	11.8	12.7	11.1	14.8	14.2
	12	13.0	13.1	14.1	15.6	19.6	21.7	22.8	24.1	25.5	25.3	24.1	22.6
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	19.2	18.2	20.2	27.6	32.1	34.3	36.9	37.9	38.9	38.8	38.3	36.9
	15	20.3	18.3	19.0	24.5	24.7	25.3	30.1	33.3	32.4	31.6	32.0	31.3
	16	21.7	24.8	26.1	32.9	34.1	35.1	36.7	36.7	35.9	35.8	35.3	33.3
	17	21.7	20.7	25.5	30.2	33.8	35.7	36.7	36.9	36.8	36.1	35.3	32.7
	18	20.6	20.8	25.7	31.9	34.8	36.3	37.1	37.7	38.1	37.1	37.7	36.9
	19	30.8	31.7	32.9	34.9	35.9	37.1	39.0	39.5	39.3	38.1	36.9	36.7
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	36.9	37.1	37.1	39.1	39.0	41.5	43.8	45.3	46.3	46.9	46.5	43.0
	22	30.3	31.6	33.1	34.4	35.9	37.7	38.7	40.6	39.7	37.1	36.6	35.8
	23	31.5	29.8	32.7	35.0	35.7	35.7	35.1	37.2	33.4	33.9	32.4	30.8
	24	22.4	13.0	21.1	24.9	25.8	27.5	26.9	28.0	29.0	30.1	30.3	27.6
	25	11.0	10.6	12.1	15.8	17.7	19.0	20.1	20.8	23.6	22.3	23.4	24.5
	26	12.1	12.2	19.2	26.3	30.3	31.1	31.8	33.5	34.3	34.3	34.2	32.7
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	28.2	28.4	29.7	28.8	29.9	30.8	31.8	33.8	34.9	36.1	36.2	36.8
Hourly Means	22.60	22.58	23.98	26.70	28.82	30.21	31.20	32.10	32.50	32.32	31.99	30.58	



STANDARD THERMOMETER.													
Hours of Mean ° Fahrenheit Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	1	10.1	7.2	9.6	10.7	12.4	15.2	18.2	20.0	21.1	18.9	20.0	18.0
	2	8.0	8.7	11.9	14.1	16.2	16.9	18.4	20.8	20.8	20.3	20.0	17.7
	3	18.4	18.6	17.5	18.6	19.5	21.6	22.9	23.9	26.0	26.4	25.3	24.4
	4	18.3	17.7	18.8	20.2	23.4	23.2	24.4	24.0	23.6	21.9	20.9	19.5
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	20.0	19.8	21.7	23.4	25.3	26.1	27.1	28.7	31.0	32.0	32.8	32.7
	7	17.3	20.0	24.1	31.0	34.4	36.1	38.5	39.8	40.6	41.6	41.1	40.0
	8	36.5	37.9	38.9	39.8	42.8	44.4	44.8	45.0	43.6	47.4	40.8	36.5
	9	23.6	22.9	23.8	24.8	25.7	25.9	26.9	27.1	28.4	29.2	28.4	27.4
	10	16.4	16.3	16.2	18.4	20.9	23.8	26.3	28.4	32.0	31.1	29.6	29.7
	11	16.5	17.7	21.1	26.3	29.2	30.6	33.1	32.9	33.9	34.7	34.0	33.1
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	21.1	24.6	24.5	24.3	24.0	24.5	24.6	25.3	25.3	23.0	22.9	22.7
	14	11.6	11.1	12.6	13.2	15.6	15.2	15.6	15.6	14.8	13.9	12.2	10.4
	15	2.7	3.9	5.9	8.0	10.9	12.0	14.8	15.5	17.1	17.5	17.3	16.1
	16	11.6	13.1	16.6	20.1	22.3	24.3	25.7	27.0	28.2	28.8	28.1	28.1
	17	24.2	24.1	25.7	24.7	24.7	25.1	25.7	25.8	26.3	26.4	27.0	26.8
	18	20.0	22.9	27.1	30.7	32.1	33.1	33.8	34.9	33.9	33.2	32.7	32.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	24.8	26.8	31.0	32.7	34.9	34.7	35.3	34.5	35.0	35.7	36.5	36.6
	21	40.4	39.5	39.1	41.9	43.7	46.6	48.1	48.9	49.3	49.3	48.3	46.3
	22	30.4	32.2	34.2	36.3	36.9	37.3	37.5	37.5	37.3	37.7	37.1	36.1
	23	33.7	33.9	34.7	35.1	37.8	39.4	40.2	41.2	39.5	40.2	39.7	39.6
	24	28.2	32.4	35.7	37.0	39.1	38.9	39.2	39.6	38.3	38.8	39.2	37.3
	25	36.2	37.1	40.6	41.8	39.1	39.3	39.3	39.6	41.5	41.2	44.2	44.1
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	33.3	33.3	33.3	33.9	34.7	36.7	40.2	41.5	41.7	40.6	39.1	38.0
	28	27.4	29.5	33.3	37.1	40.0	43.2	44.6	44.8	45.6	44.5	44.6	44.6
	29	32.0	36.1	41.5	45.3	47.3	48.3	50.6	52.6	57.8	57.7	58.9	58.9
	30	33.2	37.5	38.9	40.8	40.8	41.0	41.5	40.6	43.0	44.4	45.3	44.8
	31	36.3	38.5	42.5	48.0	51.4	55.0	57.1	56.9	58.3	61.9	59.9	57.5
Hourly Means	23.53	24.69	26.71	28.83	30.52	31.79	33.13	33.76	34.59	34.86	34.29	33.32	
APRIL.	1	33.7	34.3	33.7	33.7	34.5	36.8	36.7	36.4	36.4	36.9	35.7	35.5
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	33.1	38.1	40.8	42.3	43.8	44.4	44.1	45.3	45.3	45.2	47.9	48.0
	4	43.1	43.2	42.8	44.4	44.9	44.9	45.3	45.4	47.5	46.7	45.2	44.4
	5	31.9	33.2	34.6	36.5	38.9	41.3	43.9	42.4	41.9	41.6	41.3	41.9
	6	29.7	33.1	37.8	42.9	44.5	46.0	46.3	46.9	46.9	47.9	48.3	49.3
	7	35.3	38.5	41.9	45.7	46.8	46.3	45.3	44.4	44.6	46.0	45.2	44.7
	8	29.5	34.4	43.2	46.9	48.2	48.7	49.9	50.1	53.3	53.9	54.2	53.5
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	38.1	45.1	51.0	59.7	58.7	62.5	63.1	65.4	61.5	62.5	63.4	60.5
	11	46.9	48.5	51.4	59.7	59.6	51.5	51.0	59.4	59.4	48.9	47.3	47.3
	12	32.2	38.9	43.6	48.3	50.1	51.0	50.1	53.8	54.3	53.4	52.4	49.5
	13	37.1	38.7	39.4	39.5	41.2	40.4	40.2	42.6	40.4	40.4	40.0	38.5
	14	37.5	39.1	39.5	41.8	42.9	43.4	45.5	48.1	45.5	45.7	45.2	42.8
	15	40.6	44.0	47.7	50.0	53.4	55.1	56.3	56.7	56.5	56.7	56.1	55.4
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	33.6	36.0	36.8	38.2	40.4	42.2	43.8	45.1	45.2	42.5	43.4	43.8
	18	33.8	33.3	34.7	35.3	36.0	37.3	37.7	32.2	29.2	29.0	29.9	29.9
	19	26.3	30.6	32.2	33.3	35.9	36.7	39.5	39.1	39.4	37.9	38.2	39.6
	20	27.6	31.8	39.1	41.0	42.5	43.8	46.9	47.9	49.1	50.4	48.1	48.1
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	41.5	41.9	43.6	45.2	44.4	45.3	48.9	49.9	49.0	46.7	48.1	51.0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	36.3	36.7	37.5	40.1	42.3	43.2	44.0	43.4	42.8	43.2	42.3	41.8
	25	28.8	33.9	36.5	41.0	42.3	43.4	45.0	46.0	45.6	43.6	44.4	44.7
	26	33.3	36.7	38.7	40.6	41.0	44.5	45.1	45.1	48.1	46.7	47.2	46.6
	27	29.6	38.4	42.7	45.3	46.7	49.5	49.8	52.8	52.8	54.2	52.4	50.1
	28	38.8	46.4	44.5	42.4	44.0	45.7	44.8	46.1	48.3	49.6	47.9	47.1
	29	42.6	44.4	43.9	42.8	44.2	45.5	47.8	49.1	49.3	50.4	50.4	48.7
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	35.04	38.30	40.73	42.41	44.22	45.39	46.15	46.86	46.92	46.67	46.40	45.84	

\* Good Friday.

STANDARD THERMOMETER.

9	10	11
3	4	5
18.9	20.0	18.0
20.3	20.0	17.7
26.4	25.3	21.4
21.9	20.9	19.5
32.0	32.8	32.7
41.6	41.1	40.0
47.4	40.8	36.5
29.2	28.4	27.4
31.1	29.6	29.7
34.7	34.0	33.1
23.0	22.9	22.7
13.9	12.2	10.4
17.5	17.3	16.1
28.8	28.1	28.4
26.4	27.0	26.8
33.2	32.7	32.0
35.7	36.5	36.6
49.3	48.3	46.9
37.7	37.1	36.1
40.2	39.7	39.6
38.8	39.2	37.5
44.2	44.2	44.1
40.6	39.1	38.0
44.5	44.6	44.6
57.7	58.9	58.9
44.4	45.3	44.8
61.9	59.9	57.5
34.86	34.29	33.32
36.9	35.7	35.5
45.2	47.9	48.0
46.7	45.2	44.4
41.6	41.3	41.9
47.9	48.3	49.7
46.0	45.2	44.7
53.9	53.2	53.5
62.5	63.4	60.3
48.9	47.3	47.3
53.1	52.4	49.5
40.4	40.0	38.5
45.7	45.2	42.8
56.7	56.1	55.4
42.5	43.4	43.8
29.0	29.9	29.9
37.9	38.2	39.6
50.4	48.1	48.1
46.7	48.1	51.0
43.2	42.3	41.8
43.6	44.3	41.7
46.7	47.2	46.6
51.2	52.4	50.1
49.6	47.9	47.1
50.4	50.1	48.7
46.67	46.40	45.84

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
16.2	15.2	13.0	8.0	12.2	11.3	6.4	0.8	4.5	8.0	8.4	8.8	12.26
15.5	15.0	15.0	15.6	15.3	16.0	17.5	18.2	18.8	19.0	19.3	19.0	16.58
22.9	21.1	19.0	18.4	17.6	17.3	18.6	18.4	20.2	20.8	21.1	18.4	20.29
18.1	17.5	17.6	17.4	18.0	16.6	—	—	—	—	—	—	20.28
32.2	26.9	23.2	20.5	20.2	20.7	19.2	20.2	21.3	20.3	21.9	22.8	23.70
39.8	38.5	37.9	38.7	39.0	39.1	38.4	38.7	39.3	38.5	38.1	37.0	36.15
35.5	34.9	34.5	34.3	34.4	34.1	33.5	34.9	29.9	28.7	27.8	27.1	36.88
27.5	26.4	26.3	26.5	25.2	21.7	24.3	24.0	24.2	26.7	18.5	17.5	21.87
27.8	25.5	22.9	20.8	20.6	20.2	20.0	18.6	17.6	16.9	16.0	17.3	22.22
31.6	29.9	29.8	29.9	29.1	30.3	—	—	—	—	—	—	28.83
—	—	—	—	—	—	30.6	30.8	28.8	27.4	26.1	24.4	19.77
30.0	18.8	18.0	17.3	16.0	15.2	14.5	14.0	13.4	13.1	12.8	12.6	9.30
7.8	6.8	6.6	5.7	5.6	5.3	4.8	4.6	3.7	3.5	3.6	3.3	10.59
14.5	12.4	12.0	10.9	10.2	9.6	9.0	8.6	7.1	7.2	9.9	10.5	24.33
27.4	27.4	26.5	26.3	26.3	26.1	25.7	25.3	24.7	24.4	24.8	24.6	22.73
26.3	22.9	21.1	20.8	19.6	18.4	19.4	17.8	16.0	17.8	18.6	19.4	29.28
31.6	31.2	31.0	31.0	30.3	30.1	—	—	—	—	—	—	35.58
37.1	37.1	36.6	36.1	35.4	35.0	35.1	35.5	37.1	33.1	33.7	33.5	39.38
41.2	38.2	37.1	36.0	33.8	33.3	31.8	31.4	30.8	30.6	29.7	29.7	34.51
34.9	33.8	32.8	32.9	32.4	32.7	32.7	33.1	32.4	32.9	33.4	33.7	34.12
27.0	35.5	32.8	30.6	29.5	29.0	29.0	28.6	27.8	28.6	27.4	28.0	36.37
35.3	31.1	31.8	35.1	35.5	36.0	36.7	36.8	35.7	36.0	36.7	36.3	39.50
43.0	42.6	42.2	41.4	41.1	40.6	—	—	—	—	—	—	31.11
36.6	35.1	34.1	33.3	34.1	30.8	29.3	29.9	28.2	28.4	28.2	27.4	39.26
42.4	41.1	40.8	40.8	40.6	39.5	38.7	36.3	38.9	36.4	36.1	32.4	43.38
55.6	47.8	44.2	40.7	38.8	36.9	34.1	32.0	31.4	31.8	30.1	30.6	39.78
42.6	40.6	39.8	39.6	39.6	38.9	38.3	37.9	37.3	36.7	36.0	35.5	47.02
54.0	51.2	49.1	48.3	47.5	40.7	37.3	36.9	35.9	35.1	34.7	34.5	28.91
31.61	29.91	28.81	28.03	27.59	26.61	26.20	25.51	25.20	25.29	25.13	24.74	28.91
31.7	33.3	32.8	32.8	32.3	32.0	—	—	—	—	—	—	34.31
46.6	46.0	46.5	45.3	44.8	43.3	41.9	41.3	43.9	33.7	34.4	31.8	41.10
43.0	42.3	41.0	39.3	37.7	37.2	36.6	34.9	33.9	33.3	32.1	30.9	10.85
41.1	38.3	36.1	34.5	33.5	32.0	30.3	29.2	28.0	27.8	27.6	27.5	35.65
48.2	44.8	41.9	40.6	38.7	38.1	36.9	35.2	35.7	35.7	35.4	34.1	11.08
44.6	40.4	36.7	35.0	35.5	37.2	33.9	33.7	33.7	30.7	30.1	28.2	39.35
53.0	47.5	42.6	41.4	40.6	40.8	—	—	—	—	—	—	41.08
59.3	58.7	57.3	54.0	49.4	47.5	48.3	51.2	51.2	50.9	47.1	43.9	54.70
47.7	47.1	47.5	49.7	49.9	48.7	46.3	44.4	47.3	44.5	35.1	31.3	46.31
48.1	47.7	46.7	48.1	48.7	47.0	43.8	41.1	43.8	42.5	40.6	39.8	46.51
38.7	37.7	36.9	37.1	36.8	36.2	36.9	36.7	35.7	36.7	36.7	37.1	38.40
44.3	40.0	38.3	37.7	40.0	39.5	35.4	35.1	40.0	40.3	39.8	39.2	10.98
53.4	48.9	46.3	45.0	44.6	43.6	—	—	—	—	—	—	47.01
—	—	—	—	—	—	40.8	39.3	36.9	35.7	33.9	31.1	31.11
42.8	39.5	38.7	38.7	38.7	38.7	39.3	38.1	37.8	36.1	35.1	34.3	39.55
30.1	29.5	29.7	30.3	29.8	27.8	26.8	27.1	25.7	24.7	24.5	24.0	30.19
38.6	35.9	33.0	34.5	31.2	27.8	27.1	25.9	25.0	26.9	26.3	25.0	32.75
47.5	43.8	40.9	40.4	39.6	39.6	—	—	—	—	—	—	43.63
—	—	—	—	—	—	48.7	49.8	47.4	45.7	45.3	42.1	—
52.0	44.8	44.6	42.3	40.6	35.9	—	—	—	—	—	—	42.91
41.9	39.1	36.9	35.4	35.1	32.4	31.0	30.6	30.6	26.9	26.3	26.9	36.96
41.0	41.3	41.5	40.8	40.4	43.8	42.1	38.7	36.5	34.1	32.0	29.9	39.78
44.3	44.5	39.3	37.5	36.5	33.1	31.0	28.4	28.4	27.6	26.7	27.4	38.26
47.3	44.8	41.8	41.5	38.7	37.4	37.9	37.3	36.3	36.2	37.0	37.8	43.39
45.3	43.8	42.4	42.9	43.5	42.9	42.9	42.8	42.6	42.4	42.2	42.0	41.10
48.3	44.6	42.1	39.6	38.8	34.8	—	—	—	—	—	—	12.85
—	—	—	—	—	—	36.7	36.3	35.5	34.7	38.5	39.5	—
44.96	42.55	41.02	40.06	39.38	38.26	37.88	37.13	36.50	35.60	35.18	34.18	41.17



STANDARD THERMOMETER.													
Hours of Mean Gettinen Time.	0	1	2	3	4	5	6	7	9	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	1	40°8	42°6	41°0	40°9	48°1	48°9	49°7	46°3	44°5	46°3	47°4	47°4
	2	41°4	42°3	41°8	50°7	53°6	51°7	52°5	53°3	54°0	53°1	53°1	54°1
	3	45°6	51°4	55°0	56°2	59°5	60°4	61°4	60°1	61°3	61°1	63°7	61°6
	4	46°4	49°4	53°2	58°3	57°9	58°7	56°5	55°2	54°7	54°0	52°0	51°4
	5	51°2	63°3	60°9	65°9	67°7	69°7	69°3	70°9	68°5	69°7	70°0	62°5
	6	52°4	59°7	62°7	65°0	66°7	70°3	70°1	71°0	72°1	70°7	68°4	68°5
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	41°3	46°4	49°9	53°5	53°7	55°6	56°6	57°0	56°6	56°9	57°4	56°9
	9	45°1	52°3	55°7	57°5	57°7	57°9	59°5	62°3	60°3	56°9	57°9	56°3
	10	45°8	47°9	50°0	52°4	52°5	52°5	53°1	51°4	55°4	54°8	51°4	53°6
	11	46°1	46°1	47°7	49°4	50°2	51°8	51°2	49°3	48°7	48°3	49°8	50°8
	12	42°1	41°5	46°2	48°3	50°8	52°3	52°9	53°3	54°2	54°2	54°2	54°4
	13	36°3	38°7	40°0	40°4	40°2	42°3	43°8	48°1	45°9	46°1	43°2	41°2
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	39°9	46°6	52°5	54°1	55°7	57°5	56°0	56°5	54°0	50°6	50°4	47°9
	16	49°1	52°5	54°9	56°5	57°9	58°5	58°7	59°7	59°3	57°9	59°3	57°0
	17	42°4	52°2	54°0	57°0	58°1	60°7	61°7	62°9	63°7	64°6	65°0	62°8
	18	50°8	58°3	59°9	64°4	66°0	67°0	68°9	70°6	72°8	73°2	72°7	71°6
	19	56°3	57°9	63°5	66°1	68°7	71°7	71°4	70°7	72°0	69°5	64°9	66°5
	20	58°5	58°6	62°8	68°4	69°9	69°6	74°9	68°9	69°5	67°6	65°6	66°4
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	57°4	55°1	55°9	59°5	61°1	61°4	60°7	61°3	61°5	61°5	60°3	62°1
	23	57°1	55°0	55°6	55°2	55°0	55°0	55°2	55°8	56°9	59°5	58°9	59°9
	24	53°8	54°4	57°8	60°1	65°0	66°7	69°2	71°7	72°1	73°3	74°1	67°8
	25	56°0	57°3	59°7	62°5	66°7	69°4	70°3	70°4	72°3	76°3	78°5	73°5
	26	51°9	54°3	56°5	57°5	59°4	61°5	65°6	66°1	67°1	65°3	63°9	64°6
	27	50°8	52°8	58°2	61°5	62°3	62°4	62°2	64°9	66°3	66°0	66°9	64°8
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	59°3	63°3	62°5	61°0	69°4	64°1	63°6	72°1	71°5	73°3	70°9	75°5
	30	54°0	59°1	63°3	63°7	64°4	66°3	67°2	67°6	64°9	59°2	57°6	55°7
	31	43°8	45°5	46°1	48°8	59°7	52°5	54°0	54°9	55°1	55°6	56°7	57°3
Hourly Means	48°84	52°01	54°57	57°47	58°85	59°87	60°79	61°31	61°20	61°06	60°64	59°82	
JUNE.	1	46°6	51°2	53°1	54°9	55°9	58°1	59°8	61°3	60°7	61°3	62°2	61°1
	2	48°7	55°1	59°0	61°3	61°0	66°5	67°9	69°6	70°3	69°3	66°4	68°0
	3	66°1	65°5	65°5	67°1	67°9	68°1	69°3	69°5	70°9	71°3	70°1	68°9
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	55°2	59°1	62°9	63°3	64°1	66°6	67°3	69°2	59°9	64°0	68°9	62°6
	6	48°1	59°8	54°2	53°0	52°4	53°8	56°3	56°1	56°4	56°7	56°7	55°1
	7	47°2	49°6	51°4	53°6	56°2	58°0	60°2	61°6	63°5	63°8	62°1	62°3
	8	52°7	56°4	60°4	62°1	61°1	65°2	61°2	61°5	61°1	65°7	68°6	63°3
	9	54°8	61°1	64°1	65°6	65°5	69°0	70°9	72°1	73°1	73°3	74°3	71°1
	10	60°3	60°7	63°7	69°3	71°5	70°3	70°1	70°6	71°7	79°1	67°7	70°5
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	48°5	49°7	51°0	52°0	51°6	55°1	56°0	56°3	56°7	56°9	56°8	56°3
	13	46°6	48°9	52°0	53°4	56°7	58°3	60°7	61°7	62°5	63°0	62°2	61°3
	14	45°0	45°2	49°3	51°2	55°7	61°8	59°3	56°9	61°7	65°5	65°9	61°1
	15	61°0	67°4	72°1	74°0	78°2	85°1	89°0	89°5	91°1	92°0	91°0	90°5
	16	73°1	75°5	79°1	82°0	84°6	83°4	87°8	89°5	85°1	85°7	81°9	82°7
	17	67°1	72°5	76°0	76°9	79°9	82°3	82°7	78°7	76°3	81°9	77°0	79°9
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	69°9	65°5	70°0	72°7	72°7	74°9	75°3	78°0	73°1	72°5	74°5	72°3
	20	62°6	65°5	69°5	72°3	73°9	70°7	71°8	74°5	71°9	71°1	72°5	69°7
	21	58°9	62°7	61°3	63°9	66°1	65°1	67°3	68°3	68°3	69°7	71°5	70°6
	22	57°2	59°7	67°3	68°9	66°5	67°7	69°1	71°5	69°9	70°1	69°9	65°3
	23	61°1	62°0	63°6	61°4	67°5	70°3	71°9	74°8	77°8	73°5	72°9	68°0
	24	58°9	61°9	64°8	65°2	68°5	70°3	71°7	72°7	73°1	73°9	73°1	72°7
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	61°8	69°5	75°1	71°7	77°1	78°6	80°3	81°5	82°1	82°5	81°9	80°5
	27	60°1	65°4	70°5	74°3	74°7	74°1	75°7	77°8	76°6	76°6	77°6	72°6
	28	69°1	68°0	70°9	71°1	71°9	70°7	70°7	70°7	71°2	72°1	71°7	71°1
	29	60°4	64°9	69°3	71°9	73°3	72°1	73°1	73°5	74°5	74°8	75°9	73°3
	30	58°7	62°3	67°9	68°8	70°4	73°7	72°9	78°5	77°6	77°2	77°1	77°8
Hourly Means	57°45	60°62	63°91	65°82	67°50	68°84	70°01	70°37	70°82	71°67	71°17	69°47	

STANDARD THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
46.3	47.4	47.4	45.4	45.0	44.8	40.4	39.6	38.9	38.5	37.5	36.9	37.0	36.8	37.1	42.74
53.1	53.1	54.1	52.9	49.3	45.7	43.4	41.4	39.5	47.3	47.7	45.0	41.0	39.1	41.0	47.41
64.1	63.7	61.6	57.7	53.6	49.7	47.1	45.2	43.3	41.4	43.5	43.4	43.5	41.0	39.7	52.31
54.0	52.0	51.4	53.0	51.0	51.8	51.2	51.6	51.7	53.4	52.6	52.3	51.2	50.4	47.6	53.36
69.7	70.0	62.5	60.7	57.4	62.9	62.1	56.2	56.6	55.7	55.4	50.4	49.3	48.3	47.5	60.50
70.7	68.4	68.5	61.3	62.6	62.4	62.5	61.3	60.1	—	—	—	—	—	—	58.71
—	—	—	53.6	51.4	49.7	49.5	51.2	52.6	46.1	40.4	39.6	37.1	38.7	39.3	50.63
56.9	57.4	56.9	53.4	52.9	50.6	49.3	48.9	47.5	41.9	42.8	45.4	45.6	45.7	44.3	52.11
56.9	57.9	56.3	51.8	52.2	51.0	49.6	48.6	48.7	48.2	47.4	47.1	46.5	46.4	46.4	50.45
54.8	54.4	53.6	51.2	50.8	49.8	49.8	48.1	47.1	46.0	45.8	44.0	43.2	42.1	41.7	47.84
48.3	49.8	50.8	52.1	48.5	44.5	44.2	40.6	38.7	37.7	33.5	33.9	35.3	31.8	33.7	44.96
54.2	54.2	54.4	39.6	40.6	41.2	41.5	42.1	41.9	—	—	—	—	—	—	40.51
46.1	43.2	41.2	—	—	—	—	—	—	42.3	38.7	36.3	33.6	31.1	31.5	49.17
—	—	—	47.7	47.1	45.5	45.7	45.1	46.1	46.5	46.9	46.9	46.9	46.7	47.2	49.17
50.6	50.4	47.9	53.6	53.0	50.1	51.9	48.5	47.3	45.0	42.2	39.1	39.0	37.4	38.9	51.22
57.9	59.3	57.0	52.2	56.2	54.4	51.6	49.5	48.3	49.3	47.3	46.9	45.0	44.4	41.2	51.23
61.6	65.0	69.8	60.7	65.0	60.2	57.5	56.3	52.6	51.5	50.1	49.7	49.7	49.7	51.0	60.80
73.2	72.7	71.6	66.5	60.9	56.5	57.9	58.8	58.4	57.5	57.0	57.0	56.5	55.4	56.2	62.42
69.5	61.9	60.6	67.6	65.6	65.9	62.9	56.5	57.5	59.3	—	—	—	—	—	63.43
67.6	65.6	66.4	—	—	—	—	—	—	—	—	—	—	—	—	—
61.5	60.3	62.1	59.1	56.5	53.6	53.3	53.8	51.7	52.3	51.1	51.0	53.6	54.8	54.9	57.19
59.5	58.9	59.9	58.8	57.0	56.9	57.7	58.2	57.5	55.5	54.8	55.9	57.6	56.3	55.8	56.63
73.3	74.1	67.8	65.3	63.5	60.5	57.5	57.1	56.3	56.2	52.8	52.2	51.0	50.6	53.6	60.94
76.3	78.5	73.5	69.9	65.9	62.3	56.9	55.8	55.2	53.1	52.4	50.6	48.1	47.5	46.1	61.54
65.3	63.9	64.6	61.4	60.3	55.0	53.4	52.0	49.9	49.1	48.7	47.1	47.1	47.0	47.0	56.38
66.0	66.9	64.8	66.3	62.1	55.8	52.7	52.5	53.0	—	—	—	—	—	—	58.66
—	—	—	73.3	71.3	67.9	62.7	59.5	56.6	54.5	51.2	53.4	51.4	49.5	48.1	63.35
—	—	—	59.2	52.0	49.4	49.0	49.3	48.9	46.7	43.7	45.3	44.8	42.6	42.0	54.57
55.6	56.7	57.3	53.6	55.0	49.5	47.5	44.1	45.3	46.3	43.0	41.2	—	39.5	40.4	48.70
61.06	60.61	59.82	58.05	55.85	53.50	51.91	50.16	50.33	49.47	47.85	47.09	46.21	45.51	45.62	51.10
61.3	62.2	61.1	59.8	59.1	51.2	47.1	47.3	47.0	44.6	45.0	43.8	41.5	42.8	42.6	52.68
69.3	66.4	68.0	65.9	64.6	62.1	59.7	60.8	63.1	61.7	60.8	58.4	59.1	61.1	63.7	62.85
71.3	70.1	68.9	67.3	61.1	62.7	60.9	59.5	57.5	—	—	—	—	—	—	61.18
64.0	68.9	62.6	56.8	57.5	51.9	54.4	51.6	50.4	50.1	46.3	46.5	45.0	44.9	46.7	56.63
56.7	56.7	55.1	54.6	52.4	51.1	50.8	46.9	44.8	43.8	42.8	42.2	41.0	41.4	41.6	50.01
63.8	62.1	62.3	61.9	58.9	56.3	53.6	53.0	52.6	52.0	50.4	48.1	48.9	48.1	48.5	55.08
65.7	68.6	63.3	59.3	58.9	57.1	56.9	56.3	51.6	51.3	51.5	50.6	49.3	48.0	49.5	58.25
73.3	74.3	71.1	68.0	65.7	66.3	66.1	65.3	61.4	63.3	62.5	61.7	58.1	57.3	57.7	65.43
79.1	67.7	70.5	70.5	69.5	64.8	62.5	57.9	55.4	—	—	—	—	—	—	61.98
56.9	56.8	56.3	55.2	52.6	49.9	45.3	43.6	45.5	41.0	38.3	42.2	45.3	44.1	44.0	49.61
63.0	62.2	61.3	59.1	56.2	55.0	52.0	53.8	45.7	45.5	43.3	41.9	41.0	40.9	40.6	52.47
65.5	65.9	64.4	65.0	63.5	58.3	55.8	51.0	53.4	52.5	52.2	50.1	48.3	51.4	52.0	55.89
92.0	91.0	90.5	87.6	84.7	76.0	71.7	70.3	69.5	69.3	7.5	72.7	70.5	70.7	68.5	77.66
85.7	81.9	82.7	87.6	79.5	77.4	69.4	68.9	68.1	66.8	63.2	63.1	61.3	59.5	59.8	75.47
81.9	77.0	79.9	—	—	—	—	—	—	—	—	—	—	—	—	71.68
72.5	74.5	72.3	—	—	—	—	—	—	63.3	62.9	63.1	63.9	61.3	60.8	61.08
71.1	72.5	60.7	70.8	68.7	66.1	64.8	65.2	65.5	65.3	62.5	60.7	60.1	59.9	62.3	68.22
69.7	71.5	70.6	64.1	63.1	62.1	61.1	60.3	58.4	57.3	56.3	53.6	52.6	51.6	54.1	63.82
70.1	69.9	65.3	69.8	67.3	63.1	62.5	62.5	55.2	52.8	53.2	53.4	52.6	52.6	53.7	61.97
73.5	72.9	68.0	63.3	64.6	62.0	61.8	61.3	59.3	59.5	57.5	59.7	59.5	61.1	61.5	63.93
73.9	73.1	72.7	67.5	64.8	61.5	60.3	58.1	57.5	57.3	57.5	57.1	56.4	55.5	55.4	64.03
—	—	—	70.3	67.0	60.8	58.5	51.0	52.2	—	—	—	—	—	—	61.04
82.5	81.9	80.5	—	—	—	—	—	—	60.7	58.8	56.7	56.3	56.5	58.3	69.76
76.6	77.6	72.6	73.2	68.5	64.8	62.9	62.8	63.6	61.3	60.5	59.7	56.5	56.5	58.4	69.76
72.1	71.7	71.1	71.4	73.4	70.1	67.3	66.7	64.6	61.6	61.4	60.3	65.9	65.7	66.3	70.27
71.8	75.9	73.3	70.3	69.3	67.3	64.1	62.9	61.1	57.7	56.5	55.8	55.2	54.0	54.3	65.74
77.2	77.1	77.8	70.9	67.8	64.8	58.1	57.0	56.0	54.6	53.4	51.9	50.4	52.4	55.1	64.53
—	—	—	71.1	71.7	70.1	70.3	68.7	68.4	64.9	63.1	62.3	61.5	57.9	53.3	68.72
71.67	71.17	69.47	67.77	65.54	62.45	60.23	58.72	57.69	56.73	55.73	54.95	54.07	53.68	54.04	62.88

WET THERMOMETER.												
Hours of Mean Gettogen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.												
1	26°1	27°3	27°7	29°4	30°8	31°7	30°1	29°9	30°7	32°2	32°6	33°8
2	36°1	37°3	37°5	36°6	38°6	36°9	35°8	36°2	35°8	35°4	34°8	34°8
3	28°8	28°9	29°3	29°3	30°4	32°1	31°9	32°2	32°2	33°0	33°7	32°0
4	—	—	—	—	—	—	—	—	—	—	—	—
5	27°7	27°5	27°1	29°5	31°6	31°0	32°3	33°4	33°0	33°4	33°5	32°0
6	25°9	29°6	30°3	31°1	32°0	32°2	33°5	33°0	33°0	32°1	31°7	32°0
7	31°2	31°6	34°8	35°5	35°9	36°1	36°2	36°1	36°1	36°5	35°6	34°7
8	33°0	32°6	32°3	32°1	32°2	32°0	31°3	31°4	32°3	31°5	31°8	31°5
9	27°6	27°4	26°5	26°7	25°7	25°9	25°2	26°5	27°5	28°1	28°8	29°1
10	27°7	28°7	28°7	29°2	29°2	28°8	29°2	30°1	31°0	29°3	28°0	27°9
11	—	—	—	—	—	—	—	—	—	—	—	—
12	23°9	23°6	23°7	23°0	22°4	23°0	24°3	24°1	24°1	24°2	22°0	21°6
13	9°1	9°1	11°1	12°1	16°9	18°7	20°7	21°0	21°6	21°5	20°9	19°5
14	26°3	26°3	26°7	27°9	28°5	30°6	30°9	31°5	31°6	32°4	32°0	29°9
15	17°8	24°1	27°9	30°8	32°0	32°1	31°5	36°2	36°5	37°2	36°2	36°2
16	29°2	29°4	29°3	29°7	29°7	29°2	27°9	26°3	25°9	24°5	23°9	23°6
17	10°1	9°5	8°0	7°2	8°6	8°7	8°8	8°7	8°9	10°2	8°5	7°0
18	—	—	—	—	—	—	—	—	—	—	—	—
19	5°5	4°7	4°5	7°4	9°3	12°1	12°6	12°6	13°4	11°1	11°6	13°1
20	8°7	8°8	8°8	10°4	11°0	11°3	16°6	19°0	20°5	21°5	21°4	21°1
21	21°1	21°4	21°5	21°4	21°1	21°8	21°8	22°8	24°1	24°6	24°8	24°1
22	1°3	2°1	1°3	2°8	5°4	8°8	12°2	15°6	16°1	16°6	16°2	14°8
23	5°8	5°3	4°5	9°0	12°8	16°3	18°0	17°8	19°4	19°9	20°8	19°7
24	18°8	17°8	19°4	21°1	21°0	26°5	29°2	29°8	31°4	32°2	32°3	32°2
25	—	—	—	—	—	—	—	—	—	—	—	—
26	33°7	31°1	31°4	35°3	38°1	38°1	36°9	37°1	37°2	37°2	36°3	34°6
27	17°1	14°9	11°4	15°9	16°9	18°5	20°5	21°1	21°4	21°9	21°6	21°1
28	29°8	30°8	31°2	31°5	32°1	33°9	34°1	34°3	34°8	34°4	34°6	33°4
29	32°5	32°5	33°0	33°3	33°3	34°0	34°9	34°3	34°2	34°3	34°5	34°5
30	37°2	37°2	36°2	37°7	38°7	38°5	39°2	40°6	40°5	40°2	40°3	39°9
31	16°4	13°9	12°1	10°7	10°7	13°2	11°3	14°3	16°8	17°7	16°3	16°2
Feb. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	22°56	22°78	22°96	23°98	25°19	26°11	26°77	27°27	27°78	27°98	27°69	27°05
FEBRUARY.												
2	18°3	20°6	20°5	22°2	24°5	26°1	27°5	27°9	27°8	27°6	27°9	27°9
3	29°3	30°5	31°6	31°3	35°1	36°2	37°2	37°9	38°7	38°1	37°2	36°2
4	28°2	25°3	26°1	26°4	28°1	29°6	30°7	31°4	32°0	32°0	31°8	31°6
5	31°6	32°5	33°0	34°9	34°5	32°5	32°4	33°3	32°9	32°2	32°0	30°6
6	22°8	23°5	25°9	27°5	32°0	32°2	35°3	35°0	35°2	35°4	34°9	34°0
7	24°9	24°5	24°4	31°8	34°4	37°1	37°1	36°9	36°4	35°2	36°2	35°8
8	—	—	—	—	—	—	—	—	—	—	—	—
9	15°0	11°3	10°6	10°0	10°1	10°0	10°7	11°2	12°6	11°8	12°6	10°3
10	2°5	3°5	4°1	8°5	12°4	14°9	20°3	20°3	20°6	22°0	22°4	23°0
11	20°8	22°6	19°2	17°8	18°3	17°4	17°7	17°8	18°7	18°0	17°5	17°0
12	3°4	—	—	—	—	12°0	16°0	17°7	20°7	20°5	20°0	19°1
13	23°2	23°6	25°2	27°3	28°4	28°8	29°6	30°0	31°0	31°5	33°3	33°9
14	15°1	18°3	20°9	23°2	26°5	30°4	31°7	31°6	31°6	31°9	31°0	30°7
15	—	—	—	—	—	—	—	—	—	—	—	—
16	20°1	20°4	20°8	21°1	24°1	25°1	24°8	25°2	25°1	24°8	24°5	23°6
17	18°0	18°7	19°9	23°0	25°3	27°1	28°8	28°5	28°4	29°7	28°4	26°4
18	10°7	10°5	14°7	16°0	21°5	21°3	22°4	23°5	23°7	24°6	24°3	23°5
19	6°6	10°7	10°7	17°7	24°3	24°3	25°9	25°3	25°3	24°3	24°6	25°9
20	24°1	24°3	24°9	25°7	25°9	26°0	25°6	26°4	27°4	29°8	28°8	27°3
21	24°3	24°9	26°1	26°7	27°9	28°3	29°5	28°8	27°1	27°9	25°9	24°9
22	—	—	—	—	—	—	—	—	—	—	—	—
23	12°0	14°6	15°6	20°2	21°8	22°2	23°2	22°7	23°1	23°1	21°9	18°5
24	11°2	10°2	12°1	14°8	16°8	17°2	21°3	22°0	18°7	18°3	16°8	14°8
25	0°9	1°4	3°2	7°6	10°2	14°0	15°1	14°6	15°4	15°6	14°2	13°2
26	—	—	—	—	—	—	2°8	4°4	5°5	6°9	4°5	3°4
27	—	—	—	—	1°4	5°0	10°2	12°9	14°0	14°4	13°8	11°5
28	10°3	10°6	11°1	13°9	15°6	17°2	17°4	17°0	16°9	17°4	17°5	17°2
March 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	16°58	18°21	19°08	20°55	22°85	22°63	21°06	21°35	21°61	21°65	24°23	23°36

WET THERMOMETER.

9	10	11
3	4	5
32.2	32.6	33.8
35.4	34.8	34.8
33.0	33.7	32.0
—	—	—
33.4	33.5	32.0
32.4	31.7	32.0
36.5	35.6	34.7
31.5	31.8	31.5
28.1	28.8	29.4
29.3	28.0	27.9
—	—	—
23.2	22.0	21.6
21.5	20.9	19.5
32.4	32.0	29.9
37.2	36.2	36.2
24.5	23.9	23.6
10.2	8.5	7.0
—	—	—
14.1	14.6	13.1
21.5	21.4	21.1
24.6	24.8	24.1
16.6	16.2	14.8
19.9	20.8	19.7
32.2	32.3	32.2
—	—	—
37.2	36.3	34.6
21.9	21.6	21.1
34.4	34.6	33.4
31.3	34.5	34.5
40.2	40.3	39.9
17.7	16.3	16.2
—	—	—
27.98	27.69	27.06
—	—	—
27.6	27.9	27.9
38.1	37.2	36.2
32.0	31.8	31.6
32.2	32.0	30.6
35.4	34.9	34.0
35.2	36.2	35.8
—	—	—
11.8	12.6	10.3
22.0	22.4	23.0
18.0	17.3	17.0
20.5	20.0	19.4
31.5	33.3	33.9
31.9	31.0	30.7
—	—	—
24.8	24.5	23.6
29.7	28.4	29.4
24.6	24.3	23.5
24.3	24.6	23.9
29.8	28.8	27.3
27.9	25.9	24.9
—	—	—
23.1	21.9	18.5
18.3	16.8	14.8
15.6	14.2	13.2
6.0	4.5	3.4
13.8	13.5	11.5
17.4	17.5	17.2
—	—	—
24.65	24.23	23.36

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
34.0	34.4	34.6	34.8	34.8	34.5	34.7	35.0	35.4	35.6	36.2	36.2	32.60
34.8	33.0	32.0	31.5	30.4	30.3	27.9	26.6	26.5	27.1	26.6	27.3	32.92
31.5	30.6	30.3	29.9	29.7	28.8	—	—	—	—	—	—	30.84
—	—	—	—	—	—	32.4	32.5	32.6	31.0	30.9	26.2	26.2
29.5	27.6	27.2	28.3	28.3	27.5	27.1	25.3	26.9	23.9	23.0	25.7	28.72
32.5	33.0	33.4	32.8	32.5	32.5	32.8	33.0	33.3	31.3	34.2	33.4	32.28
34.4	34.3	35.1	34.8	34.5	34.8	34.6	35.1	34.9	34.3	33.1	33.0	34.97
32.0	30.7	29.8	29.5	29.6	29.6	28.6	28.7	28.1	28.0	27.7	27.6	30.59
30.1	29.7	28.8	28.2	26.8	27.3	27.3	27.0	27.8	28.2	29.3	29.2	27.75
28.1	27.9	28.8	29.6	30.0	29.2	—	—	—	—	—	—	28.01
—	—	—	—	—	—	26.3	25.5	25.1	24.6	24.5	24.5	—
20.5	19.9	19.6	18.7	16.3	15.6	14.2	13.8	13.1	12.7	11.5	10.0	19.37
18.3	15.4	20.4	20.9	21.1	21.3	22.8	23.0	23.8	24.9	25.4	27.2	19.46
29.5	24.9	24.3	28.3	27.5	27.3	24.6	19.9	24.5	19.4	19.0	18.8	26.65
36.6	35.9	36.6	35.4	36.2	35.2	34.9	34.6	32.6	31.6	31.0	29.5	32.98
22.8	22.6	21.7	20.6	19.5	17.9	17.2	15.9	14.4	14.4	12.4	11.5	22.48
6.3	6.8	6.3	6.4	5.4	3.2	—	—	—	—	—	—	7.53
—	—	—	—	—	—	9.3	7.7	7.1	6.4	6.1	5.6	—
11.1	9.8	9.2	8.3	7.1	6.0	5.3	5.3	6.3	6.4	7.1	8.0	8.91
21.1	21.7	21.7	22.2	22.9	22.9	20.9	21.1	21.1	21.1	21.4	20.9	18.50
22.5	21.0	18.8	16.8	13.2	11.5	8.8	6.2	3.7	1.2	0.8	0.9	16.42
13.7	13.0	12.6	12.3	12.1	12.0	8.9	4.4	7.6	6.0	3.9	2.2	9.15
19.1	17.9	17.0	15.9	15.0	14.1	13.0	11.1	11.1	15.4	15.7	16.0	14.61
31.2	29.6	29.8	30.5	30.5	31.5	—	—	—	—	—	—	28.67
—	—	—	—	—	—	32.1	31.2	30.9	30.8	31.9	33.4	—
33.3	32.5	31.8	30.3	29.8	28.5	27.6	27.4	25.3	21.8	19.8	17.8	31.62
20.9	23.8	26.0	25.5	26.7	27.6	27.7	27.5	27.6	27.7	28.2	29.6	22.67
33.3	32.5	32.6	33.2	32.9	32.4	31.6	31.0	31.0	31.2	31.4	32.0	32.50
35.1	35.6	35.6	36.1	36.2	36.2	35.9	35.1	36.0	36.7	36.1	36.7	34.94
39.7	39.4	40.7	39.6	37.2	35.6	34.4	30.5	27.8	24.3	20.6	18.6	35.61
14.8	13.5	12.8	11.5	10.6	8.9	—	—	—	—	—	—	14.13
—	—	—	—	—	—	16.4	16.9	14.8	15.2	14.8	16.0	—
26.54	25.81	25.83	25.63	25.07	24.53	24.35	23.75	23.09	22.75	22.32	22.07	25.00
—	—	—	—	—	—	—	—	—	—	—	—	—
27.9	28.6	28.7	30.4	30.6	30.5	29.5	30.0	30.3	30.8	31.0	29.8	27.37
34.4	33.8	33.1	32.7	32.2	32.0	30.3	31.4	28.8	29.2	27.7	27.4	33.14
32.2	33.0	33.4	33.7	34.2	34.7	33.7	33.0	32.8	32.2	32.0	31.5	31.23
30.5	29.4	29.2	30.0	28.6	28.1	28.3	29.6	26.5	26.3	25.9	24.2	30.26
32.7	32.0	31.8	32.0	32.5	30.5	29.5	27.9	26.8	25.7	25.9	24.7	30.24
34.4	29.4	25.3	20.6	18.0	15.9	—	—	—	—	—	—	27.45
—	—	—	—	—	—	20.3	20.2	20.1	20.1	20.1	19.6	—
9.2	8.2	7.1	6.8	6.5	6.2	4.3	4.1	4.1	3.1	2.9	2.5	8.40
23.3	23.9	25.3	24.5	25.3	26.3	25.8	24.6	22.0	21.5	20.8	21.1	19.12
16.5	15.2	13.9	12.9	12.6	11.6	10.2	10.3	10.3	2.8	—	2.9	13.89
18.0	17.9	17.3	17.3	17.1	18.5	18.8	2.8	21.3	21.8	22.5	23.2	17.87
28.3	28.9	29.8	28.8	28.6	24.1	19.2	16.3	13.5	13.3	13.5	14.8	25.22
30.3	29.4	27.5	27.5	27.2	26.8	—	—	—	—	—	—	25.39
—	—	—	—	—	—	17.7	18.9	19.8	20.3	20.5	20.3	—
22.4	22.4	22.2	21.3	20.9	19.8	17.9	17.7	19.2	19.5	19.9	19.7	21.77
24.5	23.5	22.6	21.8	21.7	20.0	20.0	18.8	16.8	9.9	5.9	3.4	21.31
16.7	12.9	10.3	10.3	10.3	9.9	8.2	6.2	6.8	5.2	5.0	5.0	14.32
25.9	27.3	24.7	24.9	25.5	25.3	25.4	24.9	23.7	23.8	23.7	23.7	22.68
26.3	25.4	23.0	25.1	25.7	25.7	24.5	24.9	24.7	25.4	25.7	25.4	25.75
24.1	23.9	22.2	21.7	19.2	18.1	—	—	—	—	—	—	—
—	—	—	—	—	—	16.4	16.7	15.6	15.2	14.6	12.7	22.61
18.7	17.5	15.9	15.0	15.7	13.8	12.2	12.8	12.9	11.4	10.7	11.6	16.96
12.8	9.5	8.0	6.4	4.6	2.3	—	—	—	—	—	—	10.43
11.4	8.8	6.9	4.1	4.8	4.1	1.5	—	—	—	—	—	8.51
1.2	1.4	1.7	—	—	—	—	—	—	—	—	—	3.18
11.4	11.8	10.5	10.5	10.0	10.3	10.3	10.3	10.6	10.6	10.7	10.3	10.67
15.7	15.4	14.6	14.3	14.2	13.5	—	—	—	—	—	—	14.60
—	—	—	—	—	—	15.9	13.9	13.5	13.2	12.7	11.5	—
22.04	21.11	20.07	20.55	20.26	19.51	18.29	18.90	18.35	17.43	16.74	16.30	20.70

WET THERMOMETER.													
Hours of Mean Garrison Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	2	11.4	13.5	16.9	20.7	23.0	21.8	22.7	22.3	24.9	24.5	23.7	23.0
	3	8.5	9.1	12.4	21.3	24.5	26.3	26.6	27.1	27.7	27.9	27.4	23.8
	4	12.9	17.8	24.3	30.3	31.6	32.2	31.7	34.8	35.4	34.9	34.5	34.7
	5	29.7	28.8	30.5	32.0	33.9	34.1	34.3	34.9	33.0	37.0	36.4	39.0
	6	27.1	27.7	28.4	29.4	27.5	27.3	27.9	27.6	27.9	27.3	27.5	26.6
	7	8.8	12.8	17.4	23.7	26.4	27.8	28.6	28.3	28.8	30.3	30.0	24.7
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	31.0	30.7	31.2	32.4	33.9	33.8	34.3	34.2	33.1	33.7	34.1	33.7
	10	27.3	28.3	32.4	34.9	35.4	35.8	35.6	34.9	35.8	35.8	35.0	34.1
	11	25.1	24.4	30.8	—	36.2	35.8	36.2	36.2	35.8	36.2	35.3	36.0
	12	31.8	34.5	35.8	37.4	39.0	39.1	39.4	41.2	40.4	39.4	39.1	39.0
	13	38.1	38.6	37.9	39.5	40.3	41.1	41.9	42.1	42.9	43.5	44.7	43.4
	14	35.2	35.8	37.6	37.5	37.4	38.1	37.0	37.1	36.4	35.8	34.2	32.9
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	27.5	27.3	26.3	27.5	26.1	26.8	25.9	26.8	28.8	30.0	31.0	32.0
	17	23.7	24.0	24.5	24.9	25.4	25.9	27.9	29.4	30.5	31.5	31.3	30.8
	18	21.1	23.4	24.9	28.2	32.0	32.4	33.9	34.9	35.4	34.9	35.6	34.3
	19	33.2	33.9	33.5	37.2	36.9	39.4	39.4	41.9	40.2	39.6	36.0	36.1
	20	26.8	29.6	35.6	37.5	38.5	40.8	40.8	40.5	42.8	42.3	40.3	39.0
	21	29.8	29.3	29.5	28.6	30.5	29.6	29.7	30.8	32.0	33.0	32.2	32.7
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	32.0	33.3	34.6	35.8	36.7	37.4	38.1	38.1	38.3	36.8	37.0	36.7
	24	38.1	38.4	38.7	39.1	39.1	38.4	38.4	38.5	39.0	39.6	38.4	39.0
	25	38.1	38.3	38.5	39.0	39.4	40.2	40.5	41.8	40.5	40.5	39.6	39.0
	26	34.7	34.6	36.0	39.6	40.4	41.1	41.6	40.7	41.9	40.3	37.7	36.5
	27	34.9	36.0	36.9	37.3	40.4	39.7	40.4	39.9	40.8	38.7	38.5	36.5
	28	33.5	33.4	34.7	35.1	35.8	37.7	36.7	36.3	36.7	35.8	35.2	33.9
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	30.5	31.7	32.0	30.0	32.6	32.7	33.9	35.0	35.8	35.3	34.9	34.7
	31	27.9	31.0	32.0	33.9	35.3	38.0	37.3	37.3	37.5	37.9	38.1	39.4
	Hourly Means	28.75	29.85	31.70	33.89	35.13	35.73	36.45	36.54	37.02	36.89	36.34	35.98
APRIL.	1	27.3	30.0	31.7	33.7	35.4	35.4	36.3	36.7	37.2	35.8	36.2	35.8
	2	27.7	30.5	33.9	34.1	34.2	36.5	36.1	35.4	35.3	35.6	34.5	34.3
	3	28.5	32.2	33.9	34.4	36.1	37.2	38.7	37.2	37.4	36.5	36.3	35.8
	4	31.6	34.3	35.7	38.4	38.9	40.3	40.8	41.0	42.1	44.8	42.6	41.4
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	39.6	39.2	39.4	40.9	41.6	43.4	46.5	47.5	47.1	46.5	47.3	47.2
	7	42.1	43.4	44.7	47.0	48.7	49.4	48.4	48.7	49.3	49.3	51.5	49.7
	8	29.6	29.6	31.7	31.0	32.4	34.1	33.0	34.5	33.3	33.7	34.5	33.4
	9	23.5	30.8	32.2	37.1	38.5	37.5	39.0	39.9	40.3	40.3	37.0	34.6
	10*	—	—	—	—	—	—	—	—	—	—	—	—
	11	38.3	38.3	40.7	49.2	50.0	51.1	49.1	45.3	40.9	50.1	38.7	36.0
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	25.9	26.4	26.6	27.5	28.5	30.3	31.6	32.0	32.4	32.2	32.9	31.4
	14	27.6	32.7	34.5	37.7	39.0	39.0	38.1	38.7	38.7	38.2	38.3	38.5
	15	28.4	27.9	27.9	28.4	32.0	33.5	34.3	34.5	39.4	35.2	35.8	36.2
	16	26.5	31.6	32.7	37.1	38.3	38.3	39.0	39.2	39.7	40.0	37.1	35.6
	17	31.7	38.4	41.7	45.2	46.7	47.2	47.7	48.5	47.5	48.4	48.7	48.1
	18	46.4	46.9	48.5	50.5	47.4	48.2	47.7	50.9	50.1	51.4	51.2	51.7
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	39.0	37.0	41.4	42.7	45.4	47.6	49.7	51.1	52.2	51.9	51.4	50.1
	21	40.3	47.7	50.7	53.2	55.4	57.3	58.3	58.5	59.4	58.3	56.6	54.9
	22	41.4	42.3	42.5	43.1	43.3	43.4	44.7	46.9	47.3	46.7	47.7	45.5
	23	47.2	49.3	50.7	46.5	48.2	49.7	49.7	50.4	50.3	50.4	49.1	51.2
	24	48.2	49.2	49.2	49.2	50.0	51.2	51.4	51.4	52.4	51.1	55.1	55.5
	25	39.4	39.6	39.4	37.2	37.2	38.3	37.4	38.1	40.1	38.7	38.2	38.5
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	37.1	41.9	42.5	46.5	47.2	47.0	46.9	46.5	46.5	47.1	48.3	48.3
	28	40.3	43.8	44.4	44.2	44.1	45.0	45.3	46.2	48.3	49.4	50.5	49.7
	29	44.6	44.6	44.6	46.4	47.4	47.1	48.2	47.2	46.8	47.2	46.7	48.1
	30	47.7	48.5	49.4	48.1	48.0	50.7	52.3	53.7	55.3	52.5	53.4	52.7
Hourly Means	35.64	38.24	39.66	41.17	42.28	43.23	43.61	44.08	44.37	44.01	43.98	43.37	

\* Good Friday.

9	10	11
3	4	5
21.5	23.7	23.0
27.9	27.4	23.8
34.9	34.5	34.7
37.0	36.4	39.0
27.3	27.5	26.6
30.3	30.0	29.7
33.7	34.1	33.7
35.8	35.0	34.1
36.2	35.3	36.0
39.1	39.1	39.0
43.5	41.7	43.4
35.8	34.2	32.9
30.0	31.0	32.0
31.5	31.3	30.8
31.9	35.6	34.3
39.6	36.0	36.1
42.3	40.3	39.0
33.0	32.2	32.7
36.8	37.0	36.7
39.6	38.4	39.0
40.5	39.6	39.0
40.3	37.7	36.5
38.7	38.5	36.5
35.8	35.2	33.9
35.3	34.9	34.7
37.9	38.1	39.4
36.89	36.31	35.98
35.8	36.2	35.8
35.6	31.5	34.3
36.5	36.3	35.8
41.8	42.6	41.4
46.5	47.3	47.2
49.3	51.5	49.7
33.7	31.5	33.1
40.3	37.0	34.6
39.1	38.7	36.0
32.2	32.9	31.4
38.2	38.3	38.5
35.2	35.8	36.2
40.0	37.1	35.6
48.4	48.7	48.1
51.4	51.2	51.7
51.9	51.4	50.1
58.3	56.6	51.9
46.7	47.7	45.3
50.4	49.1	51.2
51.1	55.1	55.5
38.7	38.2	38.5
47.1	48.3	48.3
49.4	50.5	49.7
47.2	46.7	48.1
52.5	53.4	52.7
44.01	43.98	43.37

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
19.5	14.6	14.0	11.5	11.4	8.4	7.8	7.4	7.7	9.2	7.1	9.2	15.68	
24.4	21.5	18.0	16.7	16.9	16.4	20.9	20.1	19.9	17.7	15.6	14.5	20.34	
35.1	35.1	34.6	33.7	33.7	33.1	30.3	32.8	31.6	31.3	32.4	31.0	31.37	
35.8	33.2	32.3	26.3	27.3	25.4	23.6	25.6	26.1	27.7	28.4	28.2	31.10	
23.2	19.6	16.1	14.7	12.1	12.3	9.8	10.1	9.0	8.6	9.0	8.3	20.21	
29.4	29.4	29.4	30.1	29.8	29.0	—	—	—	—	—	—	27.38	
32.9	29.6	27.7	29.5	30.6	31.0	31.7	32.2	31.7	30.8	30.5	30.8	31.90	
32.0	27.9	26.3	26.3	25.7	25.2	24.5	25.3	25.6	25.9	25.1	24.6	29.98	
34.5	32.8	31.8	31.6	31.8	31.6	30.8	30.3	29.7	29.6	30.4	30.6	32.30	
39.0	39.0	37.7	38.5	39.9	40.1	39.7	39.7	40.2	40.3	38.4	38.1	38.60	
40.9	39.4	37.4	37.2	36.9	36.9	37.2	36.1	35.3	35.3	34.8	36.0	39.05	
32.0	30.0	29.3	28.8	28.6	28.6	—	—	—	—	—	—	32.92	
—	—	—	—	—	—	30.8	31.0	28.4	29.4	29.8	28.6	—	
28.4	26.4	25.9	24.6	23.5	23.2	23.9	23.9	23.5	23.0	22.6	23.7	26.19	
31.0	26.8	25.6	21.5	23.3	22.4	21.1	20.5	19.8	18.7	19.4	19.4	25.09	
32.4	30.7	29.5	30.5	30.4	29.6	29.4	31.5	31.0	32.0	32.0	32.8	30.95	
35.3	33.7	32.1	31.4	29.5	28.4	28.4	29.6	29.6	28.3	28.1	28.6	33.76	
37.3	36.5	37.5	36.7	36.4	34.5	33.3	32.7	32.4	31.2	30.8	30.6	36.02	
31.7	30.7	28.8	26.3	24.9	25.4	—	—	—	—	—	—	30.23	
—	—	—	—	—	—	31.8	31.6	31.6	32.0	31.6	31.4	—	
35.8	36.5	34.5	36.6	37.1	37.7	38.1	38.1	38.2	38.1	38.0	38.1	36.73	
39.0	38.9	40.0	40.4	40.0	39.0	38.3	38.0	37.4	37.5	37.9	37.7	38.70	
39.0	38.9	39.2	37.3	36.7	36.3	35.8	35.5	35.2	34.7	34.4	34.3	38.03	
36.9	36.1	35.8	34.3	35.3	35.5	35.4	35.4	35.5	35.3	35.1	35.2	37.14	
37.1	36.9	36.8	36.3	35.6	36.2	35.8	34.6	34.2	33.4	33.4	33.5	36.82	
33.6	33.3	32.6	32.8	—	—	—	—	—	—	—	—	33.20	
33.9	33.1	31.8	29.8	28.2	28.1	28.0	29.3	29.2	28.6	29.5	29.4	—	
36.5	32.7	32.3	30.5	29.4	27.9	27.3	26.1	25.9	26.4	26.6	26.6	32.24	
31.66	32.93	31.88	31.12	30.70	30.19	30.31	30.41	30.06	29.88	29.66	29.60	32.72	
35.1	29.8	28.3	26.6	26.3	26.5	26.4	25.9	25.1	24.9	24.6	25.3	30.68	
32.9	29.5	27.8	28.2	27.6	26.6	27.0	27.3	27.1	27.5	27.6	26.4	30.95	
33.7	30.7	29.4	29.2	30.6	31.6	32.4	30.7	29.3	27.9	30.5	30.5	33.03	
39.7	38.8	38.1	37.9	37.6	37.4	—	—	—	—	—	—	40.28	
46.4	45.8	45.6	44.8	45.2	44.4	46.3	45.8	45.4	45.5	43.6	40.8	—	
49.7	48.9	48.2	46.0	44.6	41.5	43.7	43.6	43.3	42.5	41.8	40.9	44.17	
32.2	31.0	30.0	28.8	27.2	27.1	26.5	25.4	24.7	24.5	24.7	23.5	29.81	
33.7	32.5	33.8	32.2	31.4	31.6	—	—	—	—	—	—	35.79	
34.1	33.4	33.3	32.4	32.0	31.4	—	—	—	—	—	—	36.11	
32.0	30.8	26.6	25.9	25.5	26.5	25.4	25.6	25.4	25.6	25.3	26.1	—	
38.6	37.1	36.2	36.3	35.2	35.1	33.3	29.8	28.5	28.8	28.3	28.4	31.86	
35.6	32.6	29.6	27.6	26.8	26.8	26.4	—	25.9	25.4	25.4	24.4	30.43	
35.8	36.9	36.5	37.3	36.5	37.3	36.5	36.9	—	36.2	33.9	32.3	36.14	
47.9	46.9	45.2	42.5	41.0	40.9	39.6	38.5	40.2	40.1	43.2	47.1	43.87	
47.4	46.2	45.5	45.8	42.9	39.4	—	—	—	—	—	—	43.25	
48.7	48.1	48.0	47.7	46.2	42.9	31.0	31.4	30.7	29.6	28.8	28.4	—	
53.4	52.1	50.5	50.1	50.1	50.1	42.4	43.4	41.8	40.9	41.4	41.6	45.15	
44.1	42.8	41.9	42.5	42.6	43.5	49.3	49.1	49.3	43.6	41.8	41.2	51.30	
49.7	48.7	48.5	48.1	48.7	49.0	41.7	45.1	44.4	44.4	46.5	45.8	44.29	
54.2	47.3	45.5	45.8	47.4	48.5	47.7	47.4	46.9	46.5	46.2	48.5	48.65	
38.5	38.5	38.5	38.5	38.8	38.6	48.3	49.4	49.4	48.9	47.2	41.6	49.73	
—	—	—	—	—	—	35.4	36.2	35.3	35.1	34.9	34.5	37.70	
47.5	43.7	39.8	39.2	38.5	38.5	38.5	38.1	36.7	36.0	34.9	34.4	42.15	
48.1	47.0	41.2	43.5	43.1	42.9	43.5	45.0	47.0	47.4	47.1	46.4	45.68	
48.1	48.1	47.2	46.7	46.3	46.1	45.8	46.3	46.0	46.5	46.5	47.0	46.69	
52.4	51.0	50.1	49.7	50.1	49.7	49.7	49.6	50.3	49.9	50.9	50.4	50.67	
42.46	40.73	39.53	38.93	38.49	38.16	37.82	38.11	37.23	36.68	36.54	36.09	40.19	

WET THERMOMETER.													
Hours of Mean Gattingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	1	51°3	51°7	52°2	51°7	52°2	52°3	52°4	52°7	52°5	51°4	51°4	52°3
	2	49°6	50°7	52°4	53°4	56°3	56°8	54°6	55°5	53°5	53°1	53°1	54°4
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	40°3	48°5	53°8	53°8	55°5	54°4	56°1	54°8	55°5	55°6	57°1	53°8
	5	44°0	47°7	52°0	55°0	51°7	50°3	53°6	55°5	58°0	58°8	58°0	56°0
	6	51°5	49°4	48°4	48°6	47°1	46°4	45°3	45°6	45°2	47°2	46°9	47°4
	7	41°8	44°2	44°7	45°6	47°1	49°3	51°1	52°0	50°9	51°2	52°3	52°3
	8	49°7	52°7	53°8	55°0	54°8	55°6	55°3	56°1	56°0	57°7	53°6	53°5
	9	54°0	54°3	55°0	54°3	54°1	53°9	54°3	55°2	55°2	55°2	55°8	56°0
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	31°2	30°9	30°9	32°4	33°3	35°1	36°5	35°4	37°5	39°7	39°1	39°0
	12	39°2	41°2	42°7	45°5	46°2	47°7	52°7	52°2	53°3	53°1	53°7	51°2
	13	41°8	44°6	45°8	51°7	54°8	56°9	57°7	57°6	58°8	59°0	59°0	59°7
	14	53°6	56°9	58°3	60°9	61°5	59°4	59°7	60°2	60°4	58°0	61°6	59°1
	15	50°2	49°9	48°9	50°3	52°0	51°9	51°0	57°9	55°6	57°9	59°4	57°2
	16	44°8	47°5	51°9	55°4	55°8	57°7	57°1	57°6	57°0	56°4	57°3	55°5
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	51°9	51°3	48°5	48°9	48°4	47°2	46°9	43°0	43°5	43°9	43°1	41°6
	19	36°0	38°0	39°2	39°4	41°7	45°0	44°6	45°8	46°9	48°1	49°1	48°1
	20	40°3	43°3	45°6	48°2	49°9	50°7	50°9	50°4	53°4	50°9	50°5	49°9
	21	37°7	38°5	40°6	41°2	41°9	42°1	43°3	43°4	44°6	45°0	44°6	43°8
	22	39°2	42°9	44°5	47°9	49°0	50°5	48°3	48°7	48°5	46°7	46°7	48°1
	23	49°0	52°5	54°6	56°8	59°5	59°0	63°1	61°1	64°2	61°9	61°3	60°5
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	59°9	62°9	65°3	66°8	67°2	66°2	68°5	69°0	70°0	68°1	66°8	67°7
	26	63°3	64°1	67°2	68°4	67°7	67°6	69°4	71°9	70°3	69°2	67°9	67°9
	27	61°4	67°6	67°7	66°9	66°2	66°7	66°3	65°5	65°5	65°3	65°9	67°7
	28	57°9	60°2	61°3	63°1	66°1	64°0	65°9	67°6	66°1	63°8	63°1	63°1
	29	51°9	58°7	60°2	62°6	65°1	62°9	61°4	61°4	61°1	63°5	62°5	59°7
	30	58°3	57°3	59°7	61°6	67°4	—	—	—	—	—	—	—
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	48°29	50°29	51°74	53°28	54°33	54°54	55°43	55°81	56°02	55°63	55°72	55°22	
JUNE.	1	58°8	62°1	62°8	61°9	61°4	63°7	66°1	66°6	66°6	65°9	67°4	68°5
	2	62°5	61°9	63°4	65°9	64°5	64°5	60°2	62°7	62°5	62°5	61°2	61°3
	3	55°2	57°5	58°7	61°4	61°2	62°3	59°2	59°0	59°9	62°8	62°7	64°7
	4	59°7	62°7	62°2	62°5	63°0	62°3	61°3	65°4	62°9	58°3	58°5	60°0
	5	52°9	52°4	52°7	53°0	52°9	52°5	53°1	51°2	54°6	58°5	55°9	56°1
	6	42°5	45°8	47°7	48°9	49°7	49°8	50°3	49°4	50°7	50°0	50°5	47°9
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	46°1	48°7	54°2	55°2	55°5	57°8	57°8	58°3	57°5	57°9	59°4	59°5
	9	46°4	50°5	55°0	49°8	60°2	58°5	58°3	59°4	60°0	61°1	61°5	59°0
	10	50°3	53°7	58°7	57°1	59°5	63°8	65°7	65°9	65°7	67°2	66°8	64°9
	11	53°9	58°0	59°6	62°5	63°5	62°6	60°9	59°1	59°8	61°5	61°9	63°5
	12	46°3	47°2	48°2	50°5	54°3	53°0	52°7	52°9	53°2	53°3	54°3	64°2
	13	54°8	57°4	57°5	59°4	59°9	59°7	58°8	57°9	59°7	58°7	56°6	55°5
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	58°7	60°2	61°1	64°7	68°4	67°7	69°4	68°4	68°2	65°9	67°5	64°9
	16	56°3	57°7	58°9	60°4	61°6	60°2	62°6	62°8	62°7	62°8	63°9	63°9
	17	53°2	57°7	60°9	64°1	64°5	61°9	67°2	68°1	68°1	69°1	69°1	67°5
	18	60°2	61°8	62°1	66°8	70°2	70°1	71°3	73°2	70°8	67°7	74°0	72°4
	19	66°4	67°4	66°7	67°9	68°8	72°1	72°1	70°2	69°1	66°5	65°1	66°9
	20	55°5	55°7	55°7	56°2	56°9	56°0	55°4	55°2	55°0	54°2	53°6	54°4
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	50°2	50°7	52°9	53°5	55°3	54°6	55°0	54°8	53°5	54°6	54°9	54°4
	23	51°4	54°3	55°3	57°0	59°1	59°3	57°5	59°9	60°4	59°9	60°1	58°1
	24	53°4	58°4	56°9	57°8	59°3	59°7	59°7	60°8	59°9	63°6	58°9	61°3
	25	55°3	56°4	60°0	62°4	61°8	63°5	63°7	65°4	69°1	68°1	57°9	67°8
	26	57°5	58°0	60°6	61°5	64°3	65°4	65°1	64°8	66°9	66°9	67°9	67°0
	27	60°4	61°6	63°1	62°9	62°9	61°9	65°4	64°9	62°2	62°1	63°6	63°4
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	64°1	63°8	64°7	65°7	68°3	68°7	68°9	69°1	69°2	69°9	69°8	69°2
	30	65°6	67°2	68°1	69°1	70°1	69°8	69°5	69°2	70°3	68°3	68°8	69°5
	Hourly Means	55°29	57°38	58°76	59°93	61°43	61°81	61°93	62°20	62°26	62°20	62°39	62°50

9	10	11
3	4	5
51.4	51.4	52.3
55.1	55.1	51.4
55.6	57.1	53.8
58.8	58.0	56.0
47.2	46.9	47.4
51.2	52.3	52.3
53.7	53.6	53.5
55.2	55.8	56.0
39.7	39.1	39.0
53.1	53.7	51.2
59.0	59.0	59.7
58.0	61.6	59.1
57.9	59.4	57.2
56.4	57.3	55.5
43.9	43.1	41.6
48.1	49.1	48.1
50.9	50.5	49.9
45.0	44.6	43.8
46.7	46.7	48.1
61.9	61.3	60.5
68.1	66.8	67.7
69.2	67.9	67.9
65.3	65.9	67.7
63.8	63.1	63.1
63.5	62.5	63.7
67.7	67.0	67.1
55.63	55.72	55.22
65.9	67.4	68.5
62.5	61.2	61.3
62.8	62.7	64.7
58.3	58.5	60.0
58.5	55.9	56.1
50.0	50.5	47.9
57.9	59.4	59.5
61.1	61.5	59.0
67.2	66.8	64.9
61.5	61.9	63.5
53.3	54.3	64.2
58.7	56.6	55.5
65.9	67.5	64.9
62.8	63.9	63.9
69.1	69.1	67.5
67.7	74.0	72.4
66.5	65.1	66.9
54.2	53.6	53.4
54.6	54.9	54.4
59.9	60.1	58.1
53.6	58.9	61.3
58.1	57.9	67.8
56.9	67.9	67.0
52.1	63.6	63.4
59.9	69.8	69.2
58.3	68.8	69.5
62.20	62.39	62.50

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
52.1	51.7	51.7	52.3	53.5	51.5	51.1	50.7	50.7	50.9	50.9	50.2	51.72	
55.6	52.7	49.1	47.0	46.0	47.4	—	—	—	—	—	—	49.41	
—	—	—	—	—	—	41.4	40.9	39.8	39.2	38.9	38.5	48.98	
51.3	51.6	49.7	47.1	45.8	44.1	43.8	41.7	40.5	39.6	39.3	38.8	52.02	
55.7	53.7	52.4	50.0	50.0	50.2	50.7	48.6	48.6	48.6	48.1	51.2	44.18	
46.2	44.9	42.5	41.8	41.8	40.0	40.0	40.9	40.2	38.2	38.1	36.7	48.37	
52.5	51.5	50.5	48.3	47.0	45.6	46.3	46.8	46.7	47.9	47.0	48.3	53.97	
54.6	54.0	53.1	53.0	54.1	54.1	5	54.3	53.8	53.8	52.9	55.6	50.09	
56.6	57.1	57.5	57.8	57.8	57.9	—	—	—	—	—	—	36.25	
—	—	—	—	—	—	36.8	35.5	33.5	32.0	31.2	31.2	44.95	
39.4	39.4	36.2	37.3	36.5	36.3	36.3	37.2	37.2	37.2	37.1	39.0	55.03	
52.1	48.5	44.0	42.7	41.0	39.2	39.0	36.3	36.5	37.5	39.8	40.6	58.06	
59.9	55.2	51.0	52.5	56.2	58.2	57.2	58.7	57.3	56.4	51.1	53.6	49.55	
56.6	56.4	56.9	56.9	56.1	55.6	60.6	60.4	60.7	56.2	56.1	51.3	58.66	
51.2	49.9	48.7	47.1	46.7	46.6	44.8	44.3	44.1	43.7	43.4	43.1	53.14	
55.4	53.7	50.9	48.3	47.5	47.7	—	—	—	—	—	—	41.02	
—	—	—	—	—	—	52.5	52.4	53.7	53.9	53.4	52.3	41.42	
40.6	38.3	37.4	36.9	35.8	35.6	35.3	34.3	33.1	33.3	32.6	33.1	45.33	
47.3	42.9	42.1	38.1	37.3	37.2	37.5	37.0	38.2	38.5	38.5	37.7	39.28	
50.1	47.9	46.5	44.4	44.2	42.6	40.9	40.4	39.1	38.0	34.5	34.1	46.38	
41.0	40.5	38.7	37.1	36.7	36.0	35.4	34.9	34.1	32.9	32.7	33.1	56.44	
47.7	47.5	45.6	45.0	44.8	45.3	46.3	44.8	45.8	45.8	46.7	46.9	56.00	
58.7	57.1	56.4	55.6	55.4	55.4	—	—	—	—	—	—	64.43	
—	—	—	—	—	—	49.4	49.2	48.3	51.5	55.0	56.0	64.38	
68.8	67.7	64.9	63.4	62.7	61.7	60.4	59.5	59.6	60.6	58.3	60.2	54.4	
65.2	64.4	62.2	60.1	59.9	60.0	59.0	59.7	59.4	60.2	59.7	60.2	59.70	
66.8	64.9	61.6	59.2	59.2	55.9	55.8	54.6	53.6	51.0	53.5	54.4	62.04	
65.7	63.1	59.6	57.3	57.1	55.9	55.1	54.2	52.1	49.2	50.5	50.5	60.00	
59.7	59.5	57.7	56.8	56.9	57.0	57.7	58.7	57.5	58.3	58.7	58.8	62.08	
67.1	63.2	60.9	61.6	61.9	61.5	—	—	—	—	—	—	—	
—	—	—	—	—	—	56.1	54.9	54.3	55.5	55.1	56.9	—	
54.76	52.97	51.18	49.91	49.69	49.47	47.85	47.31	46.86	46.61	46.38	46.61	51.49	
65.3	63.5	62.5	62.1	61.6	61.3	60.6	59.7	59.2	59.7	58.2	59.8	62.72	
58.8	55.8	55.7	55.2	53.2	51.4	50.7	49.9	50.9	49.0	48.2	48.5	57.52	
63.1	59.9	58.5	59.7	59.4	58.9	58.3	58.3	58.3	57.3	57.3	58.3	59.66	
60.0	60.6	58.1	58.1	59.1	58.6	57.9	56.5	55.2	51.2	53.5	52.9	59.44	
56.3	54.6	50.9	46.5	46.4	45.6	44.6	44.0	42.7	41.8	41.2	40.5	50.17	
48.4	47.7	44.8	42.8	41.2	40.1	—	—	—	—	—	—	46.67	
—	—	—	—	—	—	49.1	48.5	45.2	44.7	42.8	41.6	51.12	
58.8	56.0	50.9	47.7	46.4	45.2	44.2	43.0	42.3	41.4	41.1	42.1	45.0	
69.4	57.4	50.9	49.6	47.5	47.1	46.4	45.0	45.0	44.4	43.8	44.4	58.56	
62.6	61.3	58.0	57.0	56.3	54.9	54.2	53.1	52.5	52.9	51.4	51.9	44.2	
60.9	58.5	55.5	53.5	50.7	52.9	48.5	46.1	45.9	45.3	44.8	44.2	55.57	
53.8	52.5	49.7	47.9	47.7	47.7	49.7	51.9	52.5	52.5	51.7	51.7	51.64	
55.4	55.5	54.9	53.4	52.4	50.7	—	—	—	—	—	—	56.74	
—	—	—	—	—	—	55.1	55.8	55.7	53.9	55.9	57.1	62.20	
63.8	61.6	60.0	59.9	58.3	58.3	57.8	58.6	58.3	58.3	57.6	51.8	57.82	
63.9	59.5	58.1	57.1	54.3	54.6	54.6	53.0	52.1	49.2	48.5	48.9	62.28	
67.5	64.6	62.3	59.8	58.7	58.0	58.9	58.3	57.1	58.0	58.3	58.9	66.92	
73.5	72.7	66.7	66.1	65.5	64.9	64.1	62.9	61.7	62.1	62.7	62.6	61.37	
66.4	64.1	64.1	63.1	62.6	61.5	59.6	58.0	57.5	56.9	56.2	55.6	—	
53.2	52.3	51.9	51.0	51.0	50.0	—	—	—	—	—	—	52.30	
—	—	—	—	—	—	47.3	47.7	47.3	46.4	46.4	48.0	52.74	
55.8	55.8	54.4	51.0	53.8	52.7	50.2	50.3	49.4	48.5	48.5	48.4	55.49	
59.5	58.3	54.4	53.3	52.3	49.9	52.5	52.4	52.2	51.7	51.5	51.5	57.41	
61.5	62.9	57.9	55.7	55.3	54.9	54.1	54.2	53.2	53.0	52.5	53.0	60.30	
68.1	62.3	60.4	59.8	57.5	57.0	56.4	55.7	55.4	55.6	55.6	58.0	62.93	
64.9	64.4	64.1	63.9	63.3	63.0	62.5	61.3	60.2	60.2	59.2	57.4	—	
62.5	61.3	60.9	61.6	61.1	61.3	—	—	—	—	—	—	62.78	
—	—	—	—	—	—	62.9	62.9	62.6	61.9	62.9	63.7	65.77	
68.2	67.6	65.7	64.1	62.9	63.0	63.1	63.7	63.3	61.8	61.6	62.1	66.58	
70.4	67.5	67.5	65.6	64.5	64.3	63.3	62.1	61.6	60.6	61.6	63.4	—	
61.65	59.91	57.65	56.48	55.50	54.92	54.87	54.34	53.74	53.20	52.81	53.07	58.18	



WET THERMOMETER.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JULY.												
1	65.3	67.2	69.6	68.5	69.8	69.3	71.6	69.8	70.2	68.7	69.0	68.4
2	61.7	62.4	62.1	62.5	63.8	63.5	68.3	67.9	67.9	68.2	67.4	67.1
3	60.4	63.7	61.3	61.5	64.5	62.4	61.3	63.1	65.6	63.6	62.5	61.3
4	55.0	62.7	66.9	67.0	69.0	70.3	71.2	69.4	70.5	68.7	69.8	68.1
5	—	—	—	—	—	—	—	—	—	—	—	—
6	60.9	64.1	62.6	67.6	63.5	67.2	67.6	63.6	61.3	63.9	63.7	61.6
7	57.6	59.1	58.3	59.1	57.9	58.9	58.5	63.5	64.4	58.3	59.3	58.1
8	56.0	58.7	61.7	62.7	65.4	65.1	66.7	68.1	69.1	70.0	70.9	69.2
9	60.4	64.5	67.9	71.0	70.0	69.8	65.4	65.2	68.5	69.8	71.0	71.5
10	72.6	74.2	78.1	78.3	77.6	77.3	81.1	72.3	78.2	80.0	78.7	71.3
11	67.2	72.8	74.0	74.8	76.3	76.1	74.6	74.6	73.8	71.3	72.3	71.2
12	—	—	—	—	—	—	—	—	—	—	—	—
13	56.1	58.7	59.5	63.0	61.7	61.7	63.3	69.8	65.3	67.7	70.3	65.6
14	50.1	51.8	57.2	53.9	55.5	55.3	56.0	55.9	57.1	57.1	51.1	53.4
15	48.1	50.3	51.5	53.0	51.4	52.7	51.2	55.0	57.9	55.4	60.6	57.1
16	51.9	57.5	58.3	61.8	57.2	56.0	56.6	56.2	57.1	57.5	57.2	58.1
17	47.7	54.0	59.1	58.7	60.4	61.8	60.9	61.3	61.3	59.2	58.3	58.9
18	51.3	59.7	61.9	63.1	63.7	64.5	61.3	63.9	61.5	63.6	61.3	64.3
19	—	—	—	—	—	—	—	—	—	—	—	—
20	62.5	65.6	65.2	67.7	68.6	68.2	68.4	67.5	69.2	69.0	68.7	67.6
21	63.7	66.1	67.7	67.2	68.1	67.7	68.5	67.1	66.6	66.4	65.4	61.6
22	62.8	63.9	61.5	66.1	65.6	65.9	67.9	67.7	66.1	68.2	66.7	66.6
23	59.2	63.1	63.9	64.5	68.7	68.8	69.8	70.1	67.9	67.1	68.4	67.0
24	65.6	64.9	63.9	61.5	64.3	61.6	64.8	63.8	65.3	66.9	66.5	66.4
25	60.0	62.5	61.5	64.9	61.9	65.3	64.5	65.8	70.2	69.1	68.8	69.0
26	—	—	—	—	—	—	—	—	—	—	—	—
27	61.5	64.9	66.3	66.3	66.5	65.3	62.9	61.8	61.8	62.9	62.7	61.3
28	59.4	62.6	65.1	66.3	67.9	67.4	66.9	67.2	68.4	68.3	67.7	69.0
29	68.3	71.2	70.5	72.8	73.3	74.3	75.8	74.0	72.8	74.3	74.6	72.8
30	71.2	73.5	75.1	75.6	75.1	74.3	75.0	74.8	73.9	73.9	72.1	72.3
31	61.8	61.6	62.4	63.3	63.6	62.9	61.7	63.3	63.9	63.7	61.5	66.5
Hourly Means	60.06	63.12	61.52	65.51	65.73	65.80	66.11	65.97	66.78	66.39	66.51	65.81
AUGUST.												
1	58.7	60.2	60.2	61.1	62.3	64.6	66.1	66.8	65.9	65.9	61.9	61.3
2	—	—	—	—	—	—	—	—	—	—	—	—
3	57.9	63.1	66.5	67.9	68.6	65.8	70.5	72.6	70.8	68.7	66.8	66.8
4	60.6	61.1	68.3	69.2	71.5	72.3	73.4	74.1	71.1	74.2	71.8	75.2
5	67.7	68.9	71.5	74.6	71.8	75.8	75.8	76.5	76.1	75.6	74.6	74.6
6	60.4	62.3	61.5	68.1	73.1	73.0	72.6	72.0	71.2	70.8	70.1	69.8
7	60.4	62.9	65.3	68.4	73.2	71.0	71.2	72.0	72.8	70.8	69.3	70.2
8	62.9	63.3	63.7	64.1	63.8	65.9	69.2	68.9	68.5	68.1	69.0	67.9
9	—	—	—	—	—	—	—	—	—	—	—	—
10	61.4	64.4	64.9	65.2	66.2	67.7	66.2	66.2	67.0	67.5	66.7	64.5
11	50.7	53.1	55.9	60.0	61.5	61.9	61.5	64.1	64.5	64.5	63.9	63.9
12	55.0	60.6	65.1	67.7	71.2	70.5	69.6	70.2	70.2	70.6	69.6	67.4
13	66.9	69.3	70.6	71.0	73.8	74.1	73.5	74.5	70.8	74.9	72.8	73.5
14	59.7	61.1	63.6	61.1	69.2	69.5	69.8	68.4	67.6	69.1	69.8	68.8
15	57.9	62.8	65.9	69.2	71.1	71.2	70.4	69.8	72.0	71.2	71.0	71.3
16	—	—	—	—	—	—	—	—	—	—	—	—
17	59.1	60.8	61.9	63.1	63.9	62.9	62.6	61.7	62.7	60.9	60.6	59.1
18	47.4	48.9	49.9	53.3	56.7	57.8	57.3	57.7	58.1	59.3	58.8	58.1
19	53.1	56.6	56.8	56.1	56.2	57.8	58.0	58.5	60.2	59.3	59.8	59.7
20	60.1	60.9	61.3	61.9	62.8	63.5	64.2	63.8	65.2	64.1	66.6	66.8
21	56.0	61.7	65.6	68.1	67.6	67.7	68.7	67.9	68.7	69.0	66.7	66.3
22	61.9	62.4	62.4	62.9	64.3	64.5	68.1	67.5	68.7	67.2	66.6	64.5
23	—	—	—	—	—	—	—	—	—	—	—	—
24	49.9	52.0	54.6	58.1	59.4	60.1	60.9	61.5	60.1	61.5	60.6	61.8
25	53.1	57.5	61.7	63.4	63.8	61.7	64.4	61.4	61.9	65.9	65.3	61.6
26	55.1	63.4	66.2	66.6	65.9	65.9	67.9	66.7	65.6	63.1	62.9	62.6
27	58.3	63.1	65.6	68.5	70.0	70.3	69.8	68.8	68.8	67.4	66.8	66.0
28	60.4	62.1	63.5	64.3	68.7	69.3	71.0	71.8	71.0	70.8	69.5	69.1
29	60.4	61.3	68.5	70.3	70.4	71.8	71.8	70.8	63.9	64.5	64.9	65.9
30	—	—	—	—	—	—	—	—	—	—	—	—
31	63.5	64.1	69.8	70.8	71.0	72.1	72.9	73.0	71.8	72.1	72.0	72.1
Hourly Means	58.52	61.32	63.60	65.31	66.97	67.55	68.09	68.08	67.76	67.46	67.09	66.75

WET THERMOMETER.

9	10	11
3	4	5
68.7	69.0	68.4
68.2	67.4	67.4
63.6	62.5	61.3
68.7	69.8	68.1
63.9	63.7	61.6
58.3	59.3	58.1
70.0	70.9	69.3
69.8	71.0	71.3
80.0	78.7	71.3
71.3	72.3	74.2
67.7	70.3	65.6
57.4	54.1	53.1
55.4	60.6	57.1
57.5	57.2	58.1
59.2	58.3	58.9
63.6	61.3	64.3
69.0	68.7	67.6
66.4	65.1	61.6
68.2	66.7	66.6
67.4	68.4	67.0
66.9	66.5	66.4
69.4	68.8	69.0
62.9	62.7	61.3
68.3	67.7	69.0
74.3	74.6	72.8
73.9	72.4	72.3
63.7	64.5	66.5
66.39	66.51	66.81
65.9	64.9	61.3
68.7	66.8	66.8
74.2	74.8	73.2
75.6	74.6	74.6
70.8	70.4	69.8
70.8	69.3	70.2
68.1	69.0	67.9
67.5	66.7	64.5
64.5	63.9	63.9
70.6	69.6	67.4
71.9	72.8	73.5
69.4	69.8	68.8
71.2	71.0	71.3
60.9	60.6	59.4
59.3	58.8	58.4
59.3	59.8	59.7
64.4	66.6	66.8
69.0	66.7	66.3
67.2	66.6	64.5
61.5	60.6	61.8
65.9	65.3	61.6
63.4	62.9	62.6
67.4	66.8	66.0
70.8	69.5	69.4
64.5	64.9	65.9
72.1	72.0	72.1
67.46	67.09	66.75

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
68.8	66.4	65.3	64.4	63.3	62.7	62.1	61.6	63.8	62.8	62.1	61.3	66.38
68.1	65.9	62.1	59.4	57.6	56.3	57.2	58.3	58.3	57.4	57.2	56.8	62.39
64.9	63.9	57.9	55.9	54.3	53.4	52.7	52.5	52.9	52.5	52.3	52.3	59.53
68.1	66.6	65.5	63.0	63.2	62.0	—	—	—	—	—	—	—
61.4	59.4	59.2	58.8	57.5	57.2	63.8	63.4	63.4	62.1	61.5	59.8	65.43
57.0	56.6	55.4	55.4	54.6	54.4	51.1	52.5	52.5	52.6	51.6	51.4	60.75
69.3	70.3	66.2	61.7	61.5	60.9	60.7	61.4	60.9	58.1	57.4	56.9	63.70
72.1	71.6	69.2	67.7	68.1	69.6	69.8	68.3	68.9	67.0	66.7	69.2	68.47
69.8	67.9	68.3	66.7	68.1	67.0	68.0	66.8	61.9	65.1	65.1	61.3	71.74
71.2	69.3	71.3	70.1	71.0	70.3	—	—	—	—	—	—	—
65.4	64.3	59.9	59.2	59.2	58.3	60.2	59.2	57.4	55.4	53.4	53.3	68.56
52.4	51.4	49.7	48.8	46.4	47.5	47.4	48.4	47.4	44.8	44.3	45.0	58.89
57.4	55.4	51.8	51.8	52.0	51.5	47.4	46.4	46.4	44.6	44.6	45.1	51.30
57.7	54.6	51.5	49.4	47.5	46.5	46.4	45.5	45.5	45.0	44.7	47.9	52.95
58.1	57.5	51.4	51.2	51.9	51.2	51.2	50.2	49.7	48.9	48.3	49.2	52.64
63.1	62.6	58.7	56.6	56.0	54.6	—	—	—	—	—	—	60.75
67.7	66.4	61.4	60.2	58.8	58.8	59.6	59.0	58.4	58.3	60.2	59.2	63.92
64.1	63.9	63.8	63.3	62.5	62.1	63.4	60.9	59.6	59.8	60.2	59.8	61.27
66.2	64.1	60.2	59.6	58.1	56.6	56.6	56.6	55.4	54.0	55.5	56.4	62.44
67.0	66.8	64.9	64.4	63.7	63.1	62.4	63.3	63.9	62.9	63.8	61.0	65.35
66.2	66.4	65.4	64.5	64.9	60.5	60.2	60.4	60.2	60.5	60.5	59.4	63.64
69.2	67.7	64.9	61.4	59.2	59.2	—	—	—	—	—	—	63.63
62.4	58.8	56.5	54.6	53.4	52.9	61.4	61.3	60.2	58.3	58.3	58.4	39.79
68.8	67.6	66.2	63.9	62.4	60.8	58.7	60.0	59.2	57.8	56.2	57.9	65.43
71.8	72.2	72.0	72.3	72.3	71.3	70.9	70.5	69.8	69.3	64.9	65.0	71.85
70.4	69.5	66.9	65.6	63.6	62.1	61.1	63.8	62.9	61.6	61.7	61.8	69.49
65.9	63.4	60.2	58.6	55.5	55.2	55.0	56.2	56.0	55.8	56.4	56.4	60.69
67.26	64.03	61.98	60.48	59.39	58.63	58.61	58.28	57.87	56.92	56.88	57.00	62.41
61.4	61.5	58.8	58.3	58.3	58.3	—	—	—	—	—	—	60.67
61.3	64.7	63.5	62.5	58.1	57.9	57.3	56.2	55.8	55.2	56.0	55.2	63.29
74.4	71.2	71.5	69.3	68.9	66.8	66.4	66.4	61.9	56.1	55.5	55.9	69.37
73.0	71.8	71.6	71.5	70.8	70.8	68.1	64.7	63.3	61.5	60.2	60.2	70.59
69.8	63.6	63.1	60.9	59.3	59.4	59.3	59.2	59.2	58.8	59.7	58.9	64.96
69.2	66.2	64.6	63.4	63.4	61.2	62.4	62.7	62.7	62.5	62.4	62.3	66.23
66.8	65.9	66.4	66.3	66.5	65.9	—	—	—	—	—	—	65.55
61.3	57.7	55.6	56.2	54.4	54.6	61.4	64.5	63.3	62.6	62.9	62.8	59.74
61.4	62.3	59.7	58.3	57.5	56.6	55.9	54.6	53.6	53.8	54.0	52.3	58.81
67.5	66.4	61.6	61.3	61.4	63.8	64.4	61.7	61.2	61.9	61.9	64.4	66.08
72.7	65.9	65.5	65.4	62.3	62.3	62.3	60.7	59.6	58.1	57.5	57.0	67.17
68.3	66.5	64.5	61.3	60.4	59.6	58.9	59.4	58.3	57.6	57.7	57.1	63.75
70.4	69.2	68.7	67.9	68.5	67.9	—	—	—	—	—	—	66.35
58.5	57.7	55.9	55.0	54.4	54.0	59.8	59.2	59.7	59.5	59.7	58.1	57.19
57.4	54.3	53.4	51.2	51.2	50.9	50.4	50.4	49.6	48.6	48.5	48.4	53.29
60.2	59.8	59.5	60.2	59.8	60.4	60.2	60.5	60.7	60.4	60.0	59.8	58.90
66.4	64.4	62.7	62.5	61.5	61.5	60.9	59.9	59.2	57.5	57.2	56.6	62.42
66.3	65.5	64.7	64.4	64.9	63.7	63.6	62.5	61.8	61.8	61.7	62.4	64.89
64.1	62.8	62.3	61.8	61.4	60.5	—	—	—	—	—	—	61.64
60.8	56.7	54.4	52.5	52.4	52.0	57.4	55.5	55.1	54.3	52.4	50.6	55.44
63.9	63.3	62.1	61.4	61.3	60.7	60.2	59.5	58.7	57.7	56.9	55.6	61.45
61.1	60.2	59.4	58.4	58.0	58.1	57.9	56.8	56.2	56.6	56.0	56.2	61.42
65.1	61.9	61.1	59.3	59.4	58.9	59.6	58.8	58.7	59.7	59.4	59.6	63.53
67.7	66.6	65.6	64.4	63.5	63.6	62.3	61.4	60.4	59.6	59.4	58.8	65.20
66.4	63.8	63.1	62.3	61.4	62.3	—	—	—	—	—	—	64.68
69.4	68.2	67.0	66.5	65.7	63.1	63.1	60.2	59.6	59.6	60.2	62.9	67.43
65.89	63.76	62.67	61.70	61.02	60.56	59.65	58.79	58.13	57.66	57.61	57.32	63.07

WET THERMOMETER.												
Units of Mean Gartingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Units of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
SEPTEMBER.	1	63.7	67.0	68.3	72.3	73.7	70.5	71.0	72.4	72.8	71.8	71.8
	2	61.4	67.9	70.2	72.5	73.6	74.6	76.0	75.5	71.8	74.0	73.8
	3	68.2	69.4	69.4	69.4	70.8	71.8	71.3	71.0	71.0	71.8	70.6
	4	65.9	67.9	69.0	70.0	70.8	73.6	73.4	73.4	73.8	73.5	73.2
	5	69.8	71.3	73.0	71.6	75.5	74.2	73.5	73.8	73.5	74.3	73.8
	6	—	—	—	—	—	—	—	—	—	—	—
	7	51.7	69.2	73.0	74.8	76.2	77.0	78.4	76.7	76.1	75.5	74.6
	8	57.8	59.1	60.2	61.3	62.8	63.5	63.1	63.1	64.9	60.5	59.2
	9	45.5	47.0	49.1	50.2	51.7	51.9	51.3	53.8	54.2	51.1	51.2
	10	53.7	51.4	55.2	51.1	54.6	54.8	54.4	55.0	56.9	57.6	58.5
	11	62.9	65.3	65.7	68.0	68.4	69.3	69.8	71.8	72.2	70.8	70.5
	12	67.2	70.8	73.3	74.2	74.2	73.9	71.8	63.4	65.9	67.0	67.4
	13	—	—	—	—	—	—	—	—	—	—	—
	14	65.3	68.3	71.2	72.2	73.8	75.5	75.0	75.8	76.7	75.4	74.4
	15	50.4	50.0	49.2	49.2	50.6	49.1	51.2	50.2	50.9	51.4	52.7
	16	43.1	47.9	52.7	55.5	57.2	57.8	57.9	57.5	57.9	57.2	56.9
	17	52.1	52.5	54.2	55.2	57.0	57.8	59.6	59.2	57.8	57.3	56.2
	18	54.6	55.1	55.8	58.3	59.6	60.7	60.8	61.5	61.6	61.8	61.7
	19	45.8	50.7	56.8	59.3	61.6	65.1	66.1	64.7	63.7	65.1	65.1
	20	—	—	—	—	—	—	—	—	—	—	—
	21	45.8	48.4	48.2	48.7	48.7	49.7	51.0	52.1	52.2	52.4	52.2
	22	38.5	42.3	49.0	51.0	55.4	56.8	57.5	58.0	58.6	58.9	59.3
	23	44.5	52.7	58.9	61.2	62.9	64.7	66.6	66.4	66.7	66.5	66.1
	24	58.3	61.8	61.8	62.9	63.3	63.4	61.4	63.9	59.4	58.9	59.1
	25	48.4	48.9	49.2	49.9	52.3	53.7	54.2	54.6	55.5	55.9	54.2
	26	42.3	41.8	47.1	50.7	52.7	52.9	53.8	55.4	55.0	55.8	55.5
	27	—	—	—	—	—	—	—	—	—	—	—
	28	37.7	40.3	42.9	45.2	47.1	51.7	51.5	51.5	53.4	53.9	53.7
	29	51.1	55.5	56.8	59.2	60.5	61.2	60.5	61.1	60.6	59.7	59.5
	30	55.6	57.4	57.8	60.5	60.8	62.6	63.3	63.1	62.3	62.3	61.3
Hourly Means	51.63	57.15	59.15	60.90	62.20	62.99	63.35	63.24	63.47	63.20	62.91	62.33
OCTOBER.	1	49.1	47.3	47.7	47.0	47.0	47.8	48.5	48.7	49.9	50.0	48.3
	2	45.5	45.1	44.9	45.3	46.2	47.1	47.1	48.0	47.3	47.5	49.2
	3	38.3	39.6	45.0	48.5	48.9	50.3	50.9	51.1	51.4	50.3	49.2
	4	—	—	—	—	—	—	—	—	—	—	—
	5	41.2	45.3	49.1	51.6	55.2	57.1	57.9	57.9	57.5	58.1	57.3
	6	40.5	41.2	47.1	51.3	56.5	57.5	58.8	59.5	59.5	59.4	58.0
	7	49.3	51.7	58.3	60.8	61.5	62.1	63.4	63.9	62.4	63.6	63.3
	8	59.3	59.0	60.9	60.9	62.1	62.5	59.6	58.5	57.5	57.2	57.0
	9	56.4	57.0	57.3	61.5	65.5	65.3	65.1	64.3	54.5	53.0	51.3
	10	36.2	36.5	37.0	38.5	40.1	42.4	43.5	44.1	44.5	45.1	45.1
	11	—	—	—	—	—	—	—	—	—	—	—
	12	48.4	51.3	52.8	54.6	55.0	55.9	56.4	56.4	57.0	56.9	57.2
	13	47.5	47.1	47.1	47.4	46.9	46.2	45.6	45.8	45.8	45.8	44.8
	14	34.9	34.3	39.1	41.5	46.4	46.5	46.4	46.2	45.8	46.4	46.2
	15	36.2	36.0	39.0	40.5	41.2	41.6	41.7	41.8	42.6	43.2	43.3
	16	45.4	46.5	47.5	48.2	51.3	52.2	53.8	56.1	55.6	55.8	55.0
	17	33.9	32.6	31.8	33.4	34.1	34.3	34.9	35.1	34.2	34.2	33.6
	18	—	—	—	—	—	—	—	—	—	—	—
	19	31.8	31.0	35.8	38.8	40.4	42.3	42.1	40.8	40.3	40.8	41.2
	20	41.0	42.6	42.6	43.5	43.1	43.8	45.0	45.4	43.3	41.2	41.4
	21	31.7	32.0	33.5	36.2	37.3	37.9	38.8	39.5	38.5	37.6	37.4
	22	36.4	36.2	36.5	37.0	36.4	35.8	34.9	34.1	34.1	32.0	31.2
	23	23.8	25.1	25.5	27.6	32.4	36.2	37.1	39.0	38.8	38.9	40.0
	24	32.8	34.3	37.1	39.4	41.4	40.9	40.9	40.9	38.9	39.1	38.2
	25	—	—	—	—	—	—	—	—	—	—	—
	26	32.3	35.5	38.3	40.5	43.1	46.4	48.2	49.4	49.1	48.4	48.1
	27	49.9	47.9	46.7	45.4	44.8	46.4	44.2	44.2	44.2	42.6	41.9
	28	28.0	28.5	30.0	30.0	31.4	31.7	32.3	34.3	35.6	36.0	35.6
	29	34.3	34.7	35.8	39.4	40.9	42.5	39.4	40.9	41.2	40.9	39.9
	30	32.0	32.2	32.9	33.9	34.1	34.6	34.4	34.5	34.9	34.5	33.9
	31	28.4	30.5	29.4	29.7	30.5	31.6	32.0	33.9	35.5	36.3	36.9
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	39.53	40.04	41.80	43.64	44.95	45.89	46.03	46.46	45.92	45.78	45.35	44.46



		WET THERMOMETER.											
Hours of Mean (unadjusted) Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean (Toronto) Time.	18	19	20	21	22	23	0	1	2	3	4	5	
NOVEMBER.	2	47.7	47.3	47.1	49.2	50.1	51.4	51.1	51.6	51.6	52.2	52.4	52.4
	3	46.0	46.0	46.7	47.9	48.7	49.6	49.7	48.7	49.2	48.5	49.4	47.5
	4	40.9	41.6	41.0	46.8	45.6	46.2	46.0	45.8	45.8	45.5	44.5	42.9
	5	36.0	36.2	38.3	41.2	41.0	44.8	45.3	45.5	44.5	44.8	44.0	41.6
	6	30.0	31.2	32.2	38.3	43.1	41.8	45.3	45.0	45.4	45.6	42.9	42.4
	7	37.3	38.3	39.7	41.6	43.1	44.8	46.4	45.5	45.8	46.1	44.9	43.5
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	19.2	19.1	49.9	50.3	52.7	52.4	53.3	53.0	52.7	52.6	52.5	51.7
	10	48.8	48.9	49.4	50.3	51.2	52.0	52.3	52.5	52.4	51.3	50.5	49.7
	11	49.4	49.9	50.1	50.2	50.4	50.5	50.3	50.7	50.5	51.2	51.2	49.9
	12	32.9	42.4	42.8	43.6	44.2	44.6	44.6	45.4	45.4	45.2	44.8	45.6
	13	41.1	41.1	41.1	41.2	41.4	41.7	41.6	41.6	41.6	41.6	41.7	41.7
	14	42.9	42.1	41.6	42.1	42.3	41.8	41.9	43.5	42.5	41.7	41.4	41.0
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	42.0	42.8	43.1	43.8	45.3	46.5	46.1	45.8	45.4	44.8	44.3	44.2
	17	38.9	40.2	42.1	43.5	44.7	44.5	45.0	46.1	45.5	45.6	45.5	45.8
	18	42.8	42.1	41.5	47.7	49.7	49.7	48.7	46.8	46.2	44.9	44.6	43.8
	19	40.9	40.2	39.4	39.2	39.6	40.2	40.2	40.0	40.0	40.2	39.2	37.7
	20	31.9	31.5	31.5	31.5	35.8	37.1	37.4	38.2	39.4	39.1	38.1	36.7
	21	45.1	34.5	34.7	35.1	35.1	36.3	37.4	37.7	39.1	40.4	39.0	39.4
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	28.3	28.3	28.1	29.3	30.1	31.2	30.6	31.0	32.0	32.7	32.6	32.7
	24	33.1	31.5	32.1	33.6	36.2	37.5	38.1	39.0	37.9	36.9	34.9	32.6
	25	23.9	20.9	19.2	19.5	18.2	18.7	18.9	19.1	19.6	19.1	20.0	20.1
	26	17.5	17.1	18.8	20.8	22.8	25.1	26.2	26.8	27.6	24.9	23.6	22.6
	27	22.2	21.1	21.7	23.4	23.1	24.2	25.9	28.0	29.4	30.7	31.0	32.6
	28	36.1	36.0	36.2	36.1	36.7	37.9	38.1	38.7	39.1	38.2	37.3	36.2
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	25.5	24.2	24.2	25.1	25.9	26.6	26.7	26.8	27.4	26.4	26.1	25.1
	Hourly Means	37.47	37.24	37.80	39.10	40.14	40.92	41.22	41.41	41.56	41.34	40.74	40.92
DECEMBER.	1	13.1	12.6	13.7	17.9	19.1	21.9	23.2	24.7	25.5	26.0	26.4	27.2
	2	33.5	31.3	35.2	36.0	37.2	38.1	39.0	40.7	42.6	41.3	40.9	42.5
	3	31.0	30.8	29.5	30.3	30.5	30.9	31.5	31.0	28.8	28.8	28.4	28.5
	4	24.5	24.6	25.7	28.3	31.0	29.5	30.6	31.2	31.6	32.0	32.0	31.6
	5	27.7	28.3	28.3	28.8	30.8	31.5	31.8	32.0	31.6	32.0	32.1	32.6
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	32.0	32.0	32.7	31.8	35.1	36.0	36.5	36.9	37.0	37.1	37.5	38.9
	8	36.3	36.2	34.2	35.1	35.6	34.8	33.5	34.1	34.3	34.4	33.3	32.7
	9	30.1	30.0	29.6	28.8	29.4	29.5	30.3	30.5	30.3	30.3	30.3	30.5
	10	31.0	31.0	30.3	29.3	29.4	30.1	30.6	31.2	31.8	32.0	31.2	29.8
	11	23.9	22.5	22.0	22.2	23.6	24.9	25.5	26.2	26.4	27.3	27.1	27.1
	12	18.9	16.9	16.1	15.9	15.0	16.1	16.6	16.6	18.0	18.8	19.4	20.1
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	15.7	15.9	15.6	15.2	15.1	16.4	17.9	19.2	20.3	20.1	19.1	18.6
	15	8.0	7.3	10.0	12.1	16.7	18.5	20.0	21.7	23.3	22.8	22.2	19.2
	16	11.6	11.9	12.4	17.1	19.9	21.2	21.9	25.6	25.6	24.6	24.6	24.7
	17	21.1	21.5	22.0	23.9	24.9	25.1	25.9	25.1	25.4	26.1	25.2	29.5
	18	14.5	14.3	10.7	14.4	17.1	20.1	23.0	25.4	26.8	27.3	26.8	26.6
	19	27.7	27.6	27.9	27.2	27.5	28.4	28.8	30.6	30.6	30.6	28.8	28.8
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	20.6	19.2	17.0	17.8	19.2	20.4	21.6	22.8	23.5	23.3	22.8	19.7
	22	20.6	19.6	18.8	18.9	19.7	20.6	20.9	21.3	23.0	23.4	23.0	20.6
	23	7.4	4.2	4.6	9.6	14.1	17.0	18.8	20.2	21.4	21.3	21.3	15.6
	24	25.5	27.1	27.1	28.3	28.8	31.4	31.7	31.6	31.8	32.2	32.2	33.3
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	16.3	16.1	15.7	17.9	21.4	24.5	27.1	27.9	29.2	30.0	29.2	30.8
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	32.9	31.8	32.3	32.0	32.8	31.2	28.4	29.5	28.2	28.1	27.9	27.5
	29	17.6	18.0	18.8	20.5	23.7	25.1	25.9	25.9	25.6	26.2	26.2	26.8
	30	36.2	36.7	36.5	37.0	37.2	38.6	38.1	39.0	37.5	36.7	36.3	35.8
	31	33.7	33.8	35.1	36.5	37.7	37.9	37.9	38.5	39.0	38.3	38.0	37.7
Hourly Means	23.41	23.12	23.15	24.45	25.86	27.02	27.69	28.45	28.81	28.88	28.55	27.90	

\* Christmas Day.

WET THERMOMETER.

9	10	11
3	4	5
52.2	52.4	52.4
48.5	49.4	47.5
45.5	44.5	42.9
41.8	41.0	41.6
45.6	42.9	42.4
46.1	44.9	43.5
—	—	—
52.6	52.5	51.7
51.3	50.5	49.7
51.2	51.2	49.9
45.2	41.8	43.9
44.6	44.7	44.7
44.7	41.4	41.6
—	—	—
44.8	44.3	41.2
45.6	45.5	45.8
41.9	41.6	43.8
40.2	39.2	37.7
39.4	38.1	36.7
40.4	39.0	39.4
—	—	—
32.7	32.6	32.7
36.9	31.9	32.0
19.1	20.0	20.1
24.9	23.6	22.6
30.7	31.0	32.0
38.2	37.3	36.2
—	—	—
26.4	26.1	25.1
—	—	—
41.34	40.74	40.42
—	—	—
26.0	26.4	27.2
41.3	40.9	42.5
28.8	28.4	28.7
32.0	32.0	31.0
32.0	32.1	32.0
—	—	—
37.1	37.5	38.9
31.4	33.3	32.7
30.3	30.3	30.5
32.0	31.2	29.8
27.3	27.1	27.1
18.8	19.4	20.1
—	—	—
20.1	19.1	18.6
22.8	22.2	19.2
24.6	24.6	21.7
26.1	25.2	22.5
27.3	26.8	26.6
30.6	28.8	28.8
—	—	—
23.3	22.8	19.7
23.4	23.0	20.6
21.3	21.3	15.6
32.2	32.2	33.5
—	—	—
30.0	29.2	30.8
—	—	—
28.4	27.9	27.5
26.2	26.2	26.8
36.7	36.3	35.8
38.3	38.0	37.7
—	—	—
28.88	28.55	27.90

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
52.2	51.7	51.9	51.2	50.1	49.7	48.5	48.9	44.8	41.4	42.7	44.3	49.20
47.5	47.2	47.3	47.4	47.4	44.8	41.8	41.2	39.5	40.4	40.2	41.0	45.98
41.4	40.7	39.8	38.7	38.3	38.3	37.7	37.4	37.4	37.3	36.6	36.4	41.48
37.7	35.3	34.5	35.1	32.8	31.8	29.9	30.6	30.6	29.9	30.5	31.0	37.33
40.7	38.9	36.5	36.0	35.8	36.2	36.3	34.9	36.3	35.6	36.0	36.5	38.58
43.9	44.0	45.2	45.0	43.9	43.9	—	—	—	—	—	—	—
—	—	—	—	—	—	47.9	47.5	48.6	49.3	49.3	49.3	44.78
51.4	51.3	51.0	51.4	50.7	50.4	50.3	49.9	49.7	49.7	49.4	48.9	50.97
49.7	49.7	49.8	50.1	50.2	49.9	50.5	49.9	49.7	49.2	49.2	49.1	50.26
49.4	48.8	48.3	46.1	45.2	44.6	44.7	44.6	44.7	44.6	44.6	43.8	48.07
44.6	44.4	44.3	43.8	41.0	43.4	43.3	43.5	43.5	43.5	43.5	43.5	44.01
44.7	44.6	44.6	44.6	44.1	43.4	43.1	43.5	43.1	43.1	42.9	43.5	44.11
41.5	42.5	43.9	43.9	43.9	43.8	—	—	—	—	—	—	—
—	—	—	—	—	—	42.7	42.5	42.3	41.0	41.4	41.8	42.33
44.3	44.2	43.7	43.4	43.3	43.0	42.3	41.9	41.3	40.1	40.2	40.2	43.43
43.2	43.6	43.4	42.2	41.5	41.6	41.7	41.6	41.8	41.5	40.9	40.9	43.87
43.3	42.2	42.1	42.0	42.0	41.4	41.7	41.6	41.8	41.5	40.9	40.9	43.87
37.5	37.5	38.2	37.2	36.5	35.3	35.1	35.3	35.1	35.1	35.1	34.1	37.88
36.1	36.3	36.0	35.6	34.7	33.9	32.9	33.3	34.2	35.4	36.0	35.3	35.83
39.4	40.2	41.8	42.4	42.5	41.4	—	—	—	—	—	—	—
—	—	—	—	—	—	28.6	28.4	28.4	28.3	29.2	28.1	35.95
32.8	32.2	32.0	32.9	32.1	35.2	35.7	36.0	36.2	34.9	34.5	34.6	32.37
32.0	29.9	29.8	29.6	28.9	28.6	29.4	27.7	26.3	25.4	24.3	24.1	31.63
20.0	19.6	17.7	16.9	16.7	16.4	16.5	16.5	16.7	19.1	19.1	17.9	18.77
22.7	23.2	23.1	23.0	24.0	24.5	24.5	25.1	25.3	24.1	23.5	22.7	23.28
32.1	33.0	33.2	33.3	33.2	34.3	35.0	34.9	34.7	34.8	36.2	36.4	30.17
35.6	35.3	34.9	34.2	32.6	31.8	—	—	—	—	—	—	—
—	—	—	—	—	—	27.9	26.8	26.6	27.7	27.5	27.6	33.97
23.0	22.0	21.6	20.1	18.5	18.2	16.9	15.4	14.7	13.6	14.2	13.5	21.74
—	—	—	—	—	—	—	—	—	—	—	—	—
39.55	39.21	39.06	38.79	38.29	38.03	37.21	36.92	36.66	36.40	36.47	36.29	38.83
—	—	—	—	—	—	—	—	—	—	—	—	—
27.1	27.9	29.1	30.5	29.8	30.6	30.8	31.7	31.7	32.0	32.0	32.4	25.72
43.6	44.4	44.2	42.1	42.1	46.7	45.3	38.8	39.2	36.0	34.7	32.4	30.62
28.4	28.1	27.4	26.3	25.1	24.5	23.3	23.6	23.7	24.0	24.1	23.8	27.55
30.6	30.8	31.2	31.1	31.2	31.0	30.8	30.6	30.9	30.9	29.4	28.3	29.93
30.3	28.4	28.1	28.6	28.2	—	—	—	—	—	—	—	—
—	—	—	—	—	—	30.6	30.7	30.7	30.7	31.4	31.4	30.19
39.0	38.9	38.6	38.7	38.8	39.0	39.1	38.5	37.7	37.7	37.2	37.4	36.96
31.8	31.8	31.5	31.2	31.2	30.6	30.7	30.7	29.6	29.8	29.7	30.9	32.61
30.3	30.0	29.6	29.4	28.6	29.2	28.6	28.4	28.4	28.4	27.8	26.8	29.38
29.8	29.2	27.2	26.3	26.0	26.4	26.4	26.6	26.1	26.1	26.0	25.1	28.70
27.5	27.5	27.8	27.3	27.2	26.3	25.6	20.8	19.4	18.6	17.7	17.9	21.27
19.9	20.0	19.1	18.1	16.4	15.9	—	—	—	—	—	—	—
—	—	—	—	—	—	15.0	15.0	15.0	15.1	15.1	15.6	17.02
17.5	17.0	16.0	15.0	12.6	10.4	10.5	11.8	12.1	12.7	8.9	9.3	15.12
16.8	15.2	13.2	11.5	11.3	10.4	10.7	9.4	10.3	11.6	10.8	11.0	14.33
22.0	23.3	25.9	22.6	23.0	21.3	21.3	21.3	21.7	21.7	22.2	21.5	21.33
18.3	16.4	17.4	19.2	18.9	16.3	14.9	15.4	13.8	13.3	13.2	12.6	19.94
29.6	25.6	24.9	27.5	26.3	26.1	26.8	27.3	27.3	27.5	27.1	28.1	23.43
28.2	27.7	27.2	27.2	27.2	27.2	—	—	—	—	—	—	—
—	—	—	—	—	—	23.0	22.8	21.5	21.1	21.8	20.9	26.68
15.8	14.3	14.1	14.4	16.4	17.4	18.1	19.2	20.7	22.1	23.5	21.9	19.53
19.2	18.6	20.7	21.4	22.2	21.7	19.7	16.4	8.7	13.2	11.1	8.6	18.80
13.3	16.8	16.3	18.7	15.4	12.4	13.4	14.8	15.0	15.0	16.1	20.4	15.18
33.3	33.6	33.6	33.2	33.7	34.1	—	—	—	—	—	—	—
—	—	—	—	—	—	21.2	21.1	20.3	20.3	19.7	16.8	28.41
30.6	31.0	31.6	31.7	32.0	33.7	—	—	—	—	—	—	—
—	—	—	—	—	—	39.4	38.4	38.1	37.6	37.5	33.6	29.22
27.3	27.3	23.5	23.4	22.9	22.8	23.7	21.9	19.4	20.8	20.5	19.9	26.50
26.5	28.4	28.3	28.8	29.6	30.8	31.5	31.8	31.8	33.7	34.3	35.6	27.10
35.3	35.4	34.7	34.3	33.9	33.9	33.9	34.5	35.1	33.9	33.7	33.8	35.75
37.9	37.6	36.3	37.1	36.5	36.4	36.5	36.2	—	35.6	35.4	35.6	36.73
—	—	—	—	—	—	—	—	—	—	—	—	—
27.20	27.12	26.85	26.73	26.40	26.25	25.80	25.30	24.79	24.94	24.57	24.41	26.16

WET THERMOMETER.													
Hours of Mean Gaiting Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
JANUARY.	1	35.4	35.2	35.0	34.5	34.4	34.3	34.5	34.1	33.2	33.0	32.4	32.0
	2	33.2	32.9	32.5	32.7	33.4	33.4	34.9	35.0	34.7	34.9	33.5	33.0
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	31.6	31.7	31.6	32.2	32.2	31.7	31.8	32.0	33.1	33.4	33.9	34.4
	5	33.3	32.2	30.6	30.8	30.2	31.8	31.3	31.3	33.9	31.4	32.6	30.7
	6	27.6	28.0	28.3	29.4	32.3	31.5	28.9	28.6	28.1	28.5	28.8	28.3
	7	27.4	26.8	26.4	25.9	25.3	24.9	23.6	22.0	21.5	22.5	21.5	20.0
	8	8.8	7.4	6.3	6.8	7.1	7.7	8.2	9.2	9.3	10.0	9.3	8.9
	9	10.7	10.4	10.7	11.4	12.6	13.5	15.1	17.3	17.2	17.0	16.3	16.1
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	2.7	1.0	0.9	5.5	9.3	9.9	10.2	10.4	11.1	12.2	12.1	11.9
	12	10.9	12.0	12.2	12.8	13.9	15.0	15.1	15.2	15.9	15.5	15.4	14.5
	13	21.9	22.4	23.4	24.7	27.2	26.8	28.5	30.0	31.0	31.0	30.0	30.0
	14	33.5	34.3	35.1	35.1	35.4	36.2	37.5	38.1	37.4	37.4	37.3	36.5
	15	36.0	36.1	36.3	37.7	38.1	38.5	39.9	41.2	41.0	39.7	39.0	39.6
	16	34.1	32.0	29.6	28.5	28.6	28.4	31.6	30.0	25.3	21.0	18.7	13.2
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	27.8	29.3	29.6	30.0	30.5	30.6	30.5	31.0	30.0	28.6	27.9	27.9
	19	9.5	8.9	8.0	7.7	7.8	8.4	8.7	8.4	9.0	8.6	7.5	6.6
	20	5.3	5.3	6.2	8.7	12.3	15.1	17.0	17.5	17.9	18.5	17.7	17.3
	21	12.6	12.2	11.0	11.3	11.3	10.7	8.7	8.7	7.6	5.3	4.7	3.8
	22	6.3	5.8	5.6	7.1	7.3	9.3	9.4	11.4	11.8	10.7	12.8	13.7
	23	19.5	20.3	21.6	23.9	25.3	27.4	28.1	26.3	26.8	26.6	27.3	25.6
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	16.4	16.7	17.1	19.0	22.0	22.8	23.2	23.4	23.6	24.0	23.4	22.8
	26	24.9	28.5	32.0	32.0	32.7	33.9	33.9	31.4	26.8	25.1	24.1	23.8
	27	11.4	11.5	12.1	13.7	13.9	13.7	13.3	13.7	13.6	13.0	11.8	10.5
	28	3.6	4.5	4.5	8.1	11.1	15.5	18.3	19.2	20.5	21.3	20.7	19.5
	29	20.6	22.2	23.1	23.6	25.5	27.9	28.8	29.2	29.4	28.8	27.9	27.4
	30	19.6	19.6	17.5	17.6	17.3	15.1	15.1	15.4	15.4	14.6	14.0	12.8
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	19.97	20.28	20.28	21.18	22.19	22.85	23.31	23.46	23.27	22.75	22.33	21.63	
FEBRUARY.	1	22.3	23.3	23.5	24.4	26.4	29.4	31.0	31.6	31.6	31.5	31.7	30.7
	2	28.1	28.1	30.4	32.2	36.1	36.2	36.3	37.2	38.0	38.0	36.8	36.4
	3	37.8	37.9	37.7	37.3	37.2	37.1	37.3	37.6	34.4	31.2	27.4	24.1
	4	9.2	9.3	9.0	10.2	11.5	13.6	15.3	18.3	18.9	19.8	19.4	18.1
	5	8.4	7.5	7.6	9.2	11.0	12.4	15.7	16.3	18.9	19.2	19.9	19.8
	6	10.9	10.2	11.1	13.2	14.7	17.0	19.4	21.6	23.0	24.1	24.5	24.0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	27.3	27.1	27.1	28.5	29.8	31.6	32.0	32.1	32.1	33.1	32.0	31.0
	9	27.1	25.3	25.3	26.6	28.1	29.6	28.6	29.2	28.4	28.3	28.4	27.6
	10	25.5	25.6	25.5	26.6	28.2	28.7	30.0	31.8	32.0	32.0	30.8	28.6
	11	14.8	15.1	14.2	15.4	18.5	18.9	18.9	20.0	18.8	18.8	18.3	17.3
	12	11.5	13.3	12.4	15.1	18.8	20.6	21.1	22.8	25.1	21.3	18.8	16.8
	13	14.0	13.5	14.0	16.1	18.5	20.5	20.7	21.3	22.3	22.3	21.9	21.7
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	27.9	27.1	25.3	24.2	24.8	22.6	21.4	19.8	19.2	19.2	19.0	17.8
	16	15.6	10.2	15.2	16.5	11.3	11.6	12.4	20.5	21.7	23.4	22.5	19.4
	17	19.6	19.4	20.0	23.0	27.3	29.2	27.5	28.4	28.6	29.6	28.1	28.1
	18	19.2	19.6	20.8	23.7	29.2	31.1	32.0	32.2	32.2	32.0	31.6	29.6
	19	25.5	25.2	25.3	25.7	26.2	28.1	28.5	28.8	31.0	31.4	30.9	30.0
	20	25.3	24.5	24.1	22.2	21.0	20.7	21.4	21.1	20.6	20.9	20.2	20.0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	13.3	13.6	13.8	14.4	15.9	17.7	17.5	18.0	18.1	18.5	18.8	18.5
	23	1.0	0.4	1.2	3.6	6.0	8.0	11.0	12.3	13.4	13.9	15.1	14.6
	24	0.1	0.9	3.6	6.8	12.0	16.1	18.9	20.6	20.5	20.6	19.9	19.6
	25	15.2	14.3	14.6	17.9	19.6	20.7	21.8	22.0	23.3	23.1	23.0	22.0
	26	6.2	7.6	14.6	18.9	23.5	24.5	24.8	24.9	24.6	23.6	23.2	22.4
	27	25.9	26.1	27.6	26.8	27.7	28.7	29.4	29.5	30.7	30.7	31.7	32.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	17.99	17.60	18.49	19.94	21.80	23.11	23.87	24.91	25.31	25.27	24.75	23.75	

WET THERMOMETER.

9			10			11			WET THERMOMETER.												Daily and Monthly Means.		
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		24	
33.0	32.4	32.0	31.6	31.2	31.4	31.1	31.8	33.0	34.3	34.1	34.9	35.1	34.6	33.2	33.5	33.0	34.3	34.1	34.9	35.1	34.6	33.2	33.5
33.9	33.5	33.0	32.7	32.6	32.2	31.8	31.9	31.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
33.4	33.9	34.4	34.4	36.2	35.8	38.1	38.9	40.6	39.0	37.4	36.2	35.5	35.3	31.1	31.3	31.6	31.8	30.1	31.8	31.1	31.8	31.1	31.3
31.4	32.6	30.7	31.4	32.0	31.8	31.8	31.8	31.0	31.0	30.3	31.0	28.7	27.9	27.5	27.5	27.3	26.8	26.8	27.9	27.3	27.5	27.5	27.9
28.5	28.8	28.3	26.6	27.9	27.3	27.4	26.8	26.4	26.3	26.3	26.4	26.8	27.3	27.3	27.3	27.3	26.8	26.8	27.9	27.3	27.5	27.5	27.9
22.5	21.5	20.0	16.6	15.1	14.3	14.0	13.7	12.3	13.0	12.6	12.0	13.4	13.2	11.8	11.8	12.0	13.4	13.4	13.2	11.8	11.8	11.8	12.74
10.0	9.3	8.9	9.2	9.1	8.8	8.3	7.5	7.6	7.9	8.7	8.8	9.1	9.5	9.5	9.5	9.5	9.1	9.1	9.5	9.5	9.5	9.5	8.46
17.0	16.3	16.1	15.9	15.6	16.0	15.7	15.2	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12.2	12.1	11.9	11.5	10.7	10.7	10.6	10.7	11.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15.5	15.4	14.5	13.6	12.2	13.0	13.7	14.1	13.9	13.1	13.2	13.1	13.5	13.3	13.3	13.3	13.3	13.1	13.1	13.5	13.3	13.3	13.3	13.3
31.0	30.0	30.0	29.6	29.1	29.3	29.9	30.0	31.0	32.1	33.1	33.5	33.9	33.3	33.3	33.3	33.3	33.1	33.1	33.5	33.9	33.3	33.3	33.3
37.4	37.3	36.3	36.2	35.9	35.0	35.2	35.4	35.2	33.3	31.5	31.2	31.6	35.4	36.3	35.6	35.6	34.6	36.0	37.4	36.0	34.5	34.5	34.5
39.7	39.0	39.6	40.5	40.5	42.1	41.6	41.4	41.4	40.2	39.7	38.5	37.4	—	—	—	—	—	—	—	—	—	—	—
21.0	18.7	15.2	13.7	12.5	11.4	11.2	10.7	10.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28.6	27.9	27.9	27.9	28.4	27.1	26.8	25.4	23.7	21.6	18.7	17.1	15.2	12.5	12.2	12.2	12.2	12.5	12.5	12.5	12.5	12.5	12.2	12.2
8.6	7.5	6.6	6.5	5.8	5.7	5.9	6.0	6.1	6.1	5.9	5.9	5.9	5.6	5.4	5.4	5.4	5.9	5.9	5.9	5.6	5.6	5.4	5.4
18.5	17.7	17.3	17.1	16.6	16.3	15.4	15.5	11.2	13.1	12.1	13.1	13.0	12.8	13.0	13.0	13.0	13.0	12.8	13.0	12.8	13.0	13.0	13.0
5.3	4.7	3.8	3.6	2.3	3.2	4.6	4.7	4.5	4.6	4.8	5.2	5.2	5.8	5.8	5.8	5.8	5.2	5.2	5.2	5.8	5.8	5.8	6.76
10.7	12.8	13.7	13.1	12.1	13.3	14.2	16.2	17.2	17.5	17.7	17.6	17.4	17.7	19.1	12.6	12.6	17.4	17.7	17.7	19.1	19.1	19.1	12.6
26.6	27.3	25.6	25.1	23.9	23.0	21.6	20.5	20.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24.0	23.4	22.8	23.2	23.2	24.2	24.7	25.4	24.4	23.5	23.3	26.4	26.7	25.9	24.6	24.6	24.6	26.7	26.7	25.9	24.6	24.6	24.6	24.6
25.1	24.1	23.8	23.9	21.8	21.6	19.6	19.2	19.8	19.9	17.1	15.4	15.2	13.8	12.8	12.8	12.8	15.4	15.2	13.8	12.8	12.8	12.8	12.8
13.0	11.8	10.5	8.5	7.0	5.8	5.2	4.4	4.3	4.1	3.6	3.2	2.1	2.8	2.7	2.8	2.7	3.2	3.2	2.1	2.8	2.8	2.7	2.7
21.3	20.7	19.5	19.0	17.3	17.5	17.0	15.9	19.0	17.1	17.9	18.6	19.1	19.2	19.8	19.8	19.8	19.1	19.2	18.6	19.1	19.2	19.8	19.8
28.8	27.9	27.4	27.3	26.8	26.3	25.5	24.7	23.1	21.3	21.1	21.6	21.7	21.8	21.0	21.0	21.0	21.7	21.7	21.6	21.7	21.8	21.0	21.0
14.6	—	—	10.8	9.8	9.2	9.2	9.2	9.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	22.0	19.6	19.8	20.5	21.1	21.4	—	—	—	—	—	—	—	—	—
22.75	22.33	21.65	21.10	20.60	20.47	20.38	20.27	20.27	20.32	19.81	19.99	19.83	19.78	19.57	21.08	—	—	—	—	—	—	—	—
31.5	31.7	30.7	30.7	30.6	30.8	30.0	29.4	29.4	30.1	28.6	27.4	29.2	29.1	28.5	28.81	—	—	—	—	—	—	—	—
38.0	36.8	36.4	37.5	37.9	37.4	37.0	36.9	36.7	37.4	37.1	37.2	37.4	36.9	36.7	35.83	—	—	—	—	—	—	—	—
31.2	27.4	24.1	21.5	18.9	16.9	16.2	15.0	13.7	11.1	11.2	12.6	11.8	11.0	9.5	21.68	—	—	—	—	—	—	—	—
19.8	19.4	18.1	17.0	15.9	15.6	14.5	13.7	13.2	12.6	12.0	11.5	11.2	10.7	9.5	13.75	—	—	—	—	—	—	—	—
19.2	19.9	19.8	19.6	19.0	17.9	17.4	16.7	15.7	15.5	15.5	13.5	13.2	11.8	11.0	11.69	—	—	—	—	—	—	—	—
24.1	24.5	24.0	22.5	20.7	20.1	19.0	18.3	18.5	—	—	—	—	—	—	19.91	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	19.0	21.4	25.2	25.9	25.7	21.91	19.91	—	—	—	—	—	—	—	—
33.1	32.0	31.0	30.6	30.6	30.5	31.3	31.4	31.8	31.8	31.0	30.7	30.5	30.8	28.8	30.56	—	—	—	—	—	—	—	—
28.3	28.4	27.6	27.2	26.3	26.4	27.2	27.6	26.4	27.5	23.2	21.1	19.1	22.0	24.6	26.31	—	—	—	—	—	—	—	—
32.0	30.8	28.6	27.9	25.5	24.9	22.0	18.5	18.0	14.3	11.5	10.3	13.6	14.0	14.2	23.25	—	—	—	—	—	—	—	—
18.8	18.3	17.3	17.0	16.2	15.4	14.7	15.5	16.0	15.9	15.6	15.6	14.7	12.8	10.7	16.21	—	—	—	—	—	—	—	—
21.3	18.8	16.8	16.0	15.3	14.8	14.3	13.5	8.2	8.7	11.0	12.4	11.2	15.4	15.4	15.70	—	—	—	—	—	—	—	—
22.3	21.9	21.7	21.6	20.4	20.6	20.1	20.1	20.3	—	—	—	—	—	—	21.87	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	29.4	29.3	29.1	29.6	28.8	28.5	28.5	—	—	—	—	—	—	—	—
19.2	19.0	17.8	17.7	17.3	16.7	16.1	14.7	13.8	13.8	14.3	16.7	17.4	16.8	16.8	19.18	—	—	—	—	—	—	—	—
23.4	22.5	19.4	19.6	21.3	21.1	22.2	18.7	17.7	17.6	18.4	18.0	18.0	18.4	18.1	17.89	—	—	—	—	—	—	—	—
29.6	28.1	28.1	26.6	24.5	22.6	20.2	17.9	17.5	15.1	14.4	11.7	11.7	17.3	18.5	22.20	—	—	—	—	—	—	—	—
32.0	31.6	29.6	28.3	28.4	27.5	26.3	25.9	26.3	26.3	26.1	26.1	26.3	25.5	26.7	27.20	—	—	—	—	—	—	—	—
31.4	30.9	30.0	29.7	29.5	29.3	29.3	29.2	28.6	28.3	28.3	28.1	27.2	26.8	25.9	28.20	—	—	—	—	—	—	—	—
20.9	20.2	20.0	20.0	20.0	19.6	19.4	18.9	19.0	—	—	—	—	—	—	19.46	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	16.0	15.6	14.8	14.0	14.1	13.7	—	—	—	—	—	—	—	—	—
18.5	18.8	18.5	18.1	17.1	14.7	13.1	8.6	7.7	6.9	5.4	4.7	3.8	2.9	1.9	12.63	—	—	—	—	—	—	—	—
13.9	15.1	14.6	8.0	2.5	1.2	3.2	4.0	2.0	1.3	0.8	1.2	1.6	0.6	0.4	5.15	—	—	—	—	—	—	—	—
20.6	19.9	19.6	19.0	18.9	20.1	19.6	18.7	18.7	19.2	18.7	18.1	18.1	17.8	17.4	15.92	—	—	—	—	—	—	—	—
23.1	23.0	22.0	18.9	12.8	9.5	10.7	10.3	9.5	9.5	9.3	6.8	5.8	5.8	8.1	14.78	—	—	—	—	—	—	—	—
23.6	23.2	22.4	23.6	23.4	24.1	25.6</																	



		WET THERMOMETER.											
Hour of Mean Gottgen's Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	1	18°5	18°6	19°8	20°8	20°8	22°6	24°6	26°5	27°4	25°8	25°1	21°5
	2	17°4	17°1	19°2	20°7	21°1	22°0	21°6	27°1	26°8	26°4	26°3	24°2
	3	21°6	25°1	26°4	27°9	29°1	30°8	32°4	31°1	31°8	31°7	32°0	32°0
	4	13°0	13°3	20°2	23°8	24°5	25°1	26°8	28°1	29°4	29°1	28°8	28°4
	5	12°1	9°8	12°6	17°7	23°6	26°0	26°2	27°3	28°2	27°9	27°9	27°1
	6	27°1	27°8	30°3	30°5	32°0	32°7	32°5	32°3	31°8	31°4	31°4	32°5
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	23°5	23°2	25°3	26°5	28°4	31°7	32°2	33°5	28°9	28°5	27°3	27°2
	9	16°4	16°5	16°5	18°6	19°9	19°9	19°7	19°1	19°3	19°6	19°7	19°9
	10	21°9	22°5	26°2	28°6	31°0	31°0	31°2	31°0	31°9	32°7	33°8	33°5
	11	14°0	14°3	15°9	17°1	17°7	18°3	20°2	19°7	20°0	19°8	18°6	18°1
	12	5°7	6°3	9°9	13°8	14°7	15°9	16°7	17°1	18°3	20°2	19°8	19°2
	13	8°9	8°7	11°1	13°3	15°6	17°6	19°1	20°1	21°7	23°0	21°5	21°3
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	11°9	13°3	14°7	16°0	17°3	20°1	18°3	20°6	21°1	19°8	19°2	19°0
	16	9°0	9°2	11°6	13°2	15°9	16°6	19°1	18°1	21°2	20°9	20°4	20°2
	17	13°7	15°2	18°1	22°6	23°9	27°8	29°2	29°1	29°2	29°1	29°2	28°1
	18	27°3	27°6	30°0	31°5	30°6	32°2	33°3	31°1	35°5	35°6	36°5	37°3
	19	22°2	23°5	25°3	27°1	29°1	30°6	32°0	32°2	32°1	32°1	32°0	30°1
	20	30°1	31°0	31°2	32°4	34°1	34°2	35°6	36°5	35°1	35°6	35°1	35°1
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	21°5	25°9	27°9	29°2	29°8	30°0	30°5	29°6	29°9	30°0	30°1	30°6
	23	22°2	33°0	33°1	33°3	31°3	35°3	37°8	36°6	37°1	36°2	35°2	34°7
	24	26°0	26°8	27°8	29°7	29°8	31°8	31°4	31°4	31°9	32°7	33°2	31°7
	25	30°7	30°4	35°3	38°5	38°1	38°1	37°9	35°1	35°8	35°8	35°4	36°5
	26	27°3	27°8	28°0	28°4	28°9	30°3	31°6	31°9	31°5	32°7	33°3	32°2
	27	16°7	15°5	15°7	17°1	19°0	20°3	21°1	21°5	21°9	22°2	22°2	22°2
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	29°4	30°9	32°3	35°3	37°9	38°2	36°7	37°1	31°1	32°7	31°1	29°8
	30	21°2	21°2	23°9	23°3	23°7	24°3	24°7	22°6	22°9	23°0	21°6	22°2
	31	14°6	14°4	15°2	15°0	16°9	17°9	19°8	21°2	22°3	22°1	21°9	22°3
Hourly Means	19°78	20°31	22°35	24°14	25°49	26°71	27°59	27°84	28°17	28°01	27°75	27°46	
APRIL.	1	—	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	—	—	—	—	—	—	—	—	—	—	—	—	—

\* No reliable observations for this month.



WET THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	—	—	—	—	—	—	—	—	—	—	
	4	37.1	41.6	44.5	45.3	47.8	48.5	48.2	46.9	45.6	45.8	45.9	46.2
	5	35.1	42.6	45.5	47.7	49.4	50.5	50.7	51.2	50.6	50.1	50.3	—
	6	39.9	44.3	47.0	48.6	49.1	50.7	52.6	52.5	52.7	50.6	49.7	47.5
	7	41.4	45.4	48.1	49.2	50.2	50.4	51.9	52.1	53.7	50.0	49.8	51.6
	8	44.4	45.6	46.7	48.6	48.4	47.4	47.8	48.6	51.6	52.5	52.5	51.9
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	45.4	47.8	50.2	51.1	52.7	53.7	53.5	54.1	56.0	55.9	57.0	55.7
	11	52.0	52.0	53.1	57.0	58.6	59.4	57.9	57.8	57.5	58.5	56.2	56.3
	12	53.6	51.4	57.1	58.2	59.8	60.7	61.7	60.8	59.1	59.0	58.8	58.6
	13	52.8	51.2	51.7	53.7	53.3	52.3	52.7	54.7	51.9	55.7	56.2	55.9
	14	48.8	52.0	54.6	53.1	51.4	52.2	51.3	50.4	50.8	52.5	52.4	54.8
	15	46.2	50.8	54.9	56.8	56.7	58.6	58.6	58.8	59.0	59.1	57.9	57.1
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	43.9	48.3	53.8	55.3	55.4	55.5	51.9	55.8	51.7	51.1	54.2	54.3
	18	41.7	49.4	52.9	57.4	57.8	57.8	59.1	60.2	58.0	58.3	58.2	58.5
	19	47.3	49.4	51.8	53.9	59.4	57.1	56.6	58.0	58.3	57.1	57.3	58.5
	20	45.3	47.1	49.0	51.8	51.9	52.4	53.1	53.7	53.9	53.4	53.3	51.8
	21	46.5	47.7	48.4	50.1	49.9	51.8	53.9	56.4	56.8	57.4	54.4	52.7
	22	56.3	59.4	57.8	59.6	61.9	64.1	63.5	60.8	62.7	62.9	60.9	58.6
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	55.1	56.7	57.1	56.9	57.5	58.4	58.7	60.6	62.0	61.6	61.8	61.4
	25	50.2	52.8	55.9	59.2	59.1	59.9	58.4	60.9	60.8	59.3	56.7	58.0
	26	36.6	38.3	40.3	41.9	43.0	46.1	47.7	47.6	48.0	50.0	51.4	50.6
	27	41.6	48.8	50.6	50.4	52.3	53.6	53.0	51.5	53.1	52.4	52.7	53.6
	28	50.6	51.2	53.4	53.4	58.6	61.4	61.8	64.0	61.2	62.0	60.9	61.7
	29	54.7	52.9	53.7	59.1	57.0	57.5	55.9	56.4	59.0	61.7	58.0	62.8
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	47.8	47.0	47.0	46.5	45.3	44.8	44.2	44.0	43.9	43.8	44.0	44.0
Hourly Means	46.68	49.15	51.17	52.70	53.60	54.37	54.61	54.91	55.29	55.15	54.60	54.83	
JUNE.	1	45.6	45.6	48.2	52.2	54.9	59.2	59.8	58.2	57.8	54.6	56.1	56.5
	2	50.6	50.6	51.6	52.0	53.9	55.3	56.9	58.7	56.5	56.5	56.4	57.2
	3	48.2	54.1	54.7	54.6	55.2	56.6	59.2	58.7	55.8	56.4	55.3	53.5
	4	53.0	54.2	55.8	51.4	54.2	55.1	53.1	53.5	52.0	51.0	49.0	48.0
	5	40.1	42.0	45.4	46.3	48.4	50.5	52.4	54.9	55.5	56.9	54.2	54.1
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	47.8	51.4	56.3	58.5	58.2	59.2	59.8	61.2	61.3	61.4	58.5	56.5
	8	52.1	51.4	51.4	52.6	55.4	55.2	54.8	54.9	57.1	58.0	56.8	55.1
	9	55.9	57.8	60.6	63.5	63.8	65.0	65.6	68.5	69.6	69.3	69.6	67.0
	10	61.8	62.0	63.0	63.0	62.4	62.0	62.6	62.5	63.2	64.0	62.0	62.2
	11	57.4	60.0	62.6	64.6	62.0	64.6	64.0	62.1	59.0	58.5	57.8	53.1
	12	46.7	48.8	54.7	56.3	55.6	56.3	56.6	58.0	58.5	58.9	60.0	59.6
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	54.5	53.2	48.6	49.0	47.4	46.7	45.0	43.2	42.2	44.7	44.0	41.4
	15	38.0	39.1	40.1	41.2	42.8	43.9	44.9	47.6	50.4	52.0	52.3	51.8
	16	43.2	44.9	46.3	47.5	48.6	49.6	49.7	49.0	48.8	50.3	50.6	50.6
	17	46.8	48.4	52.4	55.9	55.7	56.2	57.5	57.2	56.9	58.0	58.3	57.3
	18	49.0	53.3	53.3	55.4	56.0	57.8	59.0	61.0	58.0	57.2	56.4	56.3
	19	55.3	55.3	57.2	59.3	61.6	61.2	60.6	60.8	57.4	58.7	61.2	62.8
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	53.8	56.4	59.7	61.0	61.5	61.2	62.3	62.2	57.5	60.7	62.9	62.8
	22	52.5	53.9	52.5	57.4	59.6	63.0	63.8	61.6	64.0	60.4	58.5	60.1
	23	55.1	58.2	59.6	63.0	63.4	65.4	65.4	65.5	65.0	65.4	61.8	62.8
	24	55.5	60.6	62.8	64.5	66.4	68.4	65.9	63.8	65.0	67.1	66.2	63.5
	25	56.7	61.5	60.5	62.6	62.8	62.6	64.0	64.8	65.0	66.6	65.1	60.4
	26	61.6	64.7	67.9	69.7	70.1	72.3	70.9	70.7	69.5	70.3	69.1	69.1
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	58.7	58.7	56.7	58.1	59.2	59.3	62.0	66.3	61.0	60.8	61.3	61.5
	29	54.3	55.5	56.1	58.0	59.0	60.3	60.6	61.4	64.0	63.2	63.0	63.6
	30	53.9	57.4	61.7	62.8	63.4	62.0	64.2	65.1	65.0	64.0	64.9	63.0
Hourly Means	51.85	53.77	55.38	57.04	57.75	58.77	59.14	59.78	59.04	59.42	58.97	58.30	

9	10	11
3	4	5
—	—	—
—	—	—
—	—	—
45°8	45°9	46°2
50°1	50°3	—
50°6	49°7	47°5
50°0	49°8	51°6
52°5	52°5	51°9
—	—	—
55°9	57°0	55°7
58°5	56°2	56°3
59°0	58°8	58°6
55°7	56°2	55°9
52°5	52°4	54°8
59°1	57°9	57°1
—	—	—
51°1	54°2	53°3
58°3	58°2	58°5
57°1	57°3	58°5
53°4	53°3	51°8
57°4	54°4	52°7
62°9	60°9	58°6
—	—	—
61°6	61°8	61°4
59°3	56°7	58°0
50°0	51°1	50°6
52°4	52°7	53°6
62°0	60°9	61°7
61°7	58°0	62°8
—	—	—
43°8	44°0	44°0
—	—	—
55°15	54°60	54°83
—	—	—
54°6	56°1	56°5
56°5	56°4	57°2
56°4	55°3	53°5
51°0	49°0	48°0
56°9	54°2	51°1
—	—	—
61°4	58°5	56°5
58°0	56°8	55°1
69°3	69°6	67°0
64°0	62°0	62°2
58°5	57°8	53°1
58°9	60°0	59°6
—	—	—
44°7	44°0	41°
52°0	52°3	51°8
50°3	50°6	50°6
58°0	58°3	57°3
57°2	56°4	56°3
58°7	61°2	62°8
—	—	—
60°7	62°9	62°8
60°4	58°5	60°1
65°4	64°8	62°8
67°1	66°2	66°5
66°6	65°1	60°4
70°3	69°1	69°1
—	—	—
60°8	61°3	61°5
63°2	63°0	63°6
64°0	63°9	63°0
59°42	58°97	58°30

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
44°7	43°5	42°9	41°4	39°9	36°8	36°5	38°7	38°1	36°2	33°7	31°9	41°98	41°98
46°7	44°5	44°3	41°8	39°5	38°0	38°1	36°5	35°8	35°5	34°6	34°7	43°20	43°20
46°6	44°9	43°7	42°8	42°8	41°7	40°7	39°9	39°1	38°3	37°7	36°6	45°00	45°00
49°8	46°3	45°9	44°2	43°8	45°6	46°1	46°7	47°1	49°9	52°2	52°7	48°50	48°50
50°5	49°9	49°5	49°3	49°6	48°9	—	—	—	—	—	—	48°70	48°70
—	—	—	—	—	—	47°7	47°4	48°5	49°6	47°3	44°7	53°04	53°04
53°8	54°7	53°6	52°9	52°1	54°3	54°4	53°9	52°9	51°2	52°7	53°3	54°96	54°96
56°1	53°0	52°5	53°1	53°1	53°5	53°7	53°3	53°1	52°7	53°7	55°0	54°96	54°96
57°8	58°4	58°4	58°6	57°8	57°8	55°7	56°5	55°4	53°9	51°4	52°9	57°35	57°35
53°7	54°2	53°0	50°0	49°0	48°5	47°8	47°3	47°0	46°7	46°4	45°7	51°77	51°77
51°4	52°1	49°6	48°4	46°9	46°7	44°6	44°6	44°0	42°4	41°3	40°9	48°88	48°88
56°1	55°9	52°6	49°6	49°4	49°2	—	—	—	—	—	—	52°15	52°15
—	—	—	—	—	—	45°7	45°9	45°4	43°5	42°4	41°1	57°60	57°60
52°0	50°6	51°0	50°6	49°6	47°7	47°5	47°2	44°9	43°3	42°6	42°4	50°36	50°36
57°4	51°5	50°8	49°6	49°3	48°2	48°0	47°7	47°8	47°8	47°2	46°7	52°68	52°68
59°9	55°0	52°2	50°3	50°0	49°5	48°5	47°9	47°1	46°1	45°4	45°9	52°60	52°60
51°1	50°7	50°0	47°8	46°9	45°9	44°9	44°6	43°2	42°9	42°6	43°6	48°79	48°79
53°8	51°7	53°1	48°2	47°4	50°8	50°7	52°9	51°2	51°6	52°4	53°6	51°81	51°81
57°8	58°1	57°7	57°9	56°7	55°5	—	—	—	—	—	—	57°60	57°60
—	—	—	—	—	—	52°4	51°0	51°0	51°2	51°1	53°5	55°87	55°87
60°2	58°6	57°8	55°5	55°0	52°9	51°6	49°2	48°6	48°4	47°1	48°1	55°87	55°87
57°9	58°2	57°3	54°8	55°3	44°2	41°9	40°1	38°2	37°3	36°4	35°2	52°00	52°00
49°8	45°5	44°6	43°5	42°4	40°8	39°4	39°1	39°7	39°5	36°4	37°0	43°30	43°30
52°9	50°7	49°0	47°6	46°9	45°5	45°0	43°5	42°6	42°2	44°0	45°1	48°82	48°82
61°7	57°9	57°1	58°0	58°3	56°9	56°7	56°7	55°0	55°5	55°5	55°2	57°95	57°95
58°4	55°3	54°1	54°0	52°9	53°1	—	—	—	—	—	—	54°11	54°11
—	—	—	—	—	—	45°7	45°3	46°6	47°4	48°5	48°7	45°70	45°70
44°6	44°6	44°6	45°6	46°0	46°6	47°1	46°8	46°9	47°0	47°4	47°2	—	—
53°61	51°91	51°05	49°82	49°19	48°28	47°10	43°71	46°15	45°79	45°43	45°49	50°73	50°73
—	—	—	—	—	—	—	—	—	—	—	—	—	—
55°5	55°3	54°7	52°8	52°3	51°2	50°6	49°2	48°8	48°2	49°8	50°2	52°76	52°76
56°4	53°7	52°5	51°3	50°9	48°3	47°5	46°5	44°9	44°8	43°8	44°4	51°72	51°72
53°9	53°0	52°7	52°7	51°2	51°6	52°5	52°3	54°1	53°1	52°7	52°5	53°90	53°90
47°8	46°9	45°1	44°2	42°8	42°0	40°7	40°0	37°4	36°1	35°1	31°7	46°91	46°91
52°7	52°7	50°0	48°1	46°0	44°2	—	—	—	—	—	—	48°38	48°38
—	—	—	—	—	—	46°5	46°5	44°7	44°0	42°3	42°6	54°70	54°70
53°8	52°5	52°3	52°0	51°5	52°3	51°6	51°	50°6	51°2	51°4	51°9	54°29	54°29
54°3	54°1	53°9	53°9	51°7	51°3	54°3	54°3	55°	53°3	52°9	52°9	51°29	51°29
67°1	67°5	65°6	62°4	63°1	61°4	63°	61°7	61°1	60°9	59°8	59°6	63°87	63°87
61°2	61°0	59°8	60°1	58°8	58°2	53°3	60°9	59°5	59°8	57°4	56°5	60°96	60°96
50°6	48°5	49°0	48°0	47°9	48°2	48°0	7°7	47°5	46°3	45°1	44°9	53°89	53°89
59°3	56°6	53°1	52°7	52°2	51°5	—	—	—	—	—	—	54°20	54°20
—	—	—	—	—	—	51°3	51°1	50°7	50°7	50°9	50°7	43°05	43°05
44°1	43°5	41°5	39°5	38°6	38°0	37°8	37°5	37°6	37°6	37°2	37°4	43°05	43°05
51°2	49°6	47°7	46°1	44°8	44°6	44°6	44°2	41°7	43°5	42°3	42°1	45°39	45°39
50°4	50°6	50°6	45°1	44°6	44°3	43°3	43°3	42°6	42°3	40°5	41°7	46°60	46°60
56°2	56°1	50°7	47°9	45°7	45°2	43°9	43°0	41°7	41°3	42°8	44°9	50°83	50°83
55°7	55°9	56°8	57°7	57°4	57°9	57°8	56°9	56°1	56°2	55°9	55°9	56°33	56°33
62°2	55°6	53°7	52°0	50°6	50°2	—	—	—	—	—	—	53°94	53°94
—	—	—	—	—	—	52°5	51°1	51°4	50°6	50°8	50°6	57°04	57°04
61°8	58°0	56°2	55°2	55°3	51°9	51°9	52°1	50°6	49°1	48°8	51°1	57°04	57°04
59°9	57°9	56°1	55°0	51°9	51°0	53°7	53°7	53°4	53°3	49°0	50°6	56°74	56°74
62°9	60°7	59°0	57°8	57°0	56°9	54°3	52°3	50°6	49°8	50°0	50°2	58°96	58°96
65°6	64°0	63°2	56°5	54°7	51°3	53°2	52°5	51°8	51°8	51°4	53°1	60°20	60°20
62°2	60°0	59°6	57°3	57°0	58°5	59°6	60°3	59°9	69°1	59°6	57°8	61°02	61°02
66°8	65°2	65°0	65°8	64°3	62°2	—	—	—	—	—	—	65°59	65°59
—	—	—	—	—	—	66°6	64°0	57°9	57°3	56°7	57°5	57°85	57°85
60°9	59°4	56°6	56°2	55°2	55°4	51°6	51°0	53°2	53°1	53°4	52°9	57°85	57°85
59°9	58°8	55°7	53°7	53°9	53°3	51°4	50°6	50°6	50°6	50°2	50°9	56°57	56°57
61°8	59°8	56°2	54°3	52°9	51°8	50°8	49°0	48°1	47°5	47°2	48°0	57°24	57°24
57°47	56°01	54°47	53°02	52°24	51°83	51°68	50°95	50°16	49°70	49°12	49°45	54°81	54°81

WET THERMOMETER.												
Hours of Mean Cottage Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JULY.												
1	51°1	54°5	57°4	61°4	66°0	69°0	66°5	66°5	65°5	61°2	64°2	64°6
2	54°4	58°8	62°0	67°5	67°0	66°6	67°7	69°0	68°7	69°0	69°3	69°7
3	58°2	62°8	68°3	68°9	70°0	70°4	69°6	70°3	70°8	70°2	70°9	71°6
4	—	—	—	—	—	—	—	—	—	—	—	—
5	60°2	62°6	65°0	70°6	71°0	70°4	71°4	71°4	71°4	71°7	67°1	65°9
6	62°4	64°8	64°6	65°8	66°6	68°3	69°3	71°5	73°6	72°7	75°6	70°0
7	62°9	64°3	65°3	69°4	70°0	72°0	72°5	72°5	73°0	73°2	72°4	73°5
8	65°5	68°3	71°0	73°7	71°9	73°7	73°5	73°7	72°1	71°9	71°1	71°9
9	65°4	68°3	70°9	72°2	72°0	74°3	73°0	73°2	72°6	72°1	70°0	69°1
10	64°8	66°6	67°3	68°7	69°4	70°7	69°8	71°4	71°5	70°5	70°1	68°7
11	—	—	—	—	—	—	—	—	—	—	—	—
12	66°6	70°7	71°9	72°7	73°5	74°7	73°6	76°2	77°0	75°7	74°1	72°7
13	66°2	69°7	70°1	73°3	72°1	72°7	72°9	72°3	70°3	68°7	67°7	65°6
14	52°9	54°7	56°7	58°2	58°6	61°0	61°0	62°8	62°0	60°4	61°0	60°8
15	53°3	56°5	59°8	62°7	65°0	66°2	68°1	68°9	68°4	68°9	68°3	67°3
16	63°0	66°3	68°4	69°8	71°5	72°1	71°9	73°1	72°5	71°9	71°7	70°5
17	67°9	68°4	69°9	72°5	71°7	75°1	76°1	74°7	76°1	72°7	74°3	74°9
18	—	—	—	—	—	—	—	—	—	—	—	—
19	70°0	73°7	76°2	75°9	77°2	78°2	78°8	77°0	74°9	77°2	77°0	76°4
20	69°1	72°0	74°2	73°5	75°1	73°3	74°9	75°1	74°7	76°1	73°3	72°7
21	68°5	71°2	70°3	71°4	73°5	74°7	73°9	74°4	75°5	73°5	73°3	72°5
22	68°1	66°4	66°4	61°7	64°8	64°8	66°5	67°9	65°8	66°0	65°6	65°6
23	51°7	56°6	61°1	61°2	64°4	64°8	64°8	63°9	63°0	65°0	66°6	66°6
24	57°3	60°8	64°4	65°6	64°4	64°8	64°8	64°2	65°3	66°6	65°6	64°0
25	—	—	—	—	—	—	—	—	—	—	—	—
26	56°1	54°9	53°5	51°8	52°0	52°1	52°0	53°5	53°5	53°3	53°7	52°7
27	47°7	50°2	52°1	54°7	55°3	56°1	57°3	57°3	56°2	56°1	57°3	58°2
28	48°5	52°9	55°5	57°3	59°8	58°2	56°7	59°0	57°5	57°2	57°7	56°5
29	55°7	59°1	60°6	61°9	62°7	63°9	64°0	63°4	63°6	65°7	63°6	64°1
30	55°0	57°9	58°3	58°3	62°2	60°3	60°8	60°3	62°0	62°8	62°6	62°8
31	50°6	58°4	60°6	62°0	63°4	63°3	65°0	62°2	62°2	62°3	62°8	59°6
Aug. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	59°74	62°64	64°52	66°25	67°11	67°69	68°01	68°41	68°11	67°99	67°29	66°93
AUGUST.												
2	51°2	57°3	60°0	61°8	63°4	64°4	64°4	65°8	64°0	64°9	66°4	62°8
3	53°3	58°2	59°4	63°1	62°6	62°4	63°0	62°8	62°0	62°7	64°8	63°8
4	56°7	61°0	65°3	64°8	64°0	65°7	66°0	64°8	65°2	67°5	67°1	66°8
5	57°9	61°1	64°4	66°6	66°5	65°7	66°4	66°6	66°6	65°4	65°2	64°4
6	60°5	61°7	64°0	66°3	69°9	69°7	69°9	69°1	68°7	69°4	66°8	64°0
7	55°7	55°9	58°2	60°0	62°6	66°0	65°9	66°0	64°7	64°1	65°2	63°9
8	—	—	—	—	—	—	—	—	—	—	—	—
9	62°4	62°8	63°6	65°0	65°4	66°6	68°1	69°7	69°7	70°6	69°6	69°1
10	64°2	65°8	67°2	69°6	71°8	72°1	71°7	72°0	72°5	70°9	70°9	70°3
11	65°8	66°6	68°1	67°4	67°7	69°7	70°2	70°7	68°5	65°6	66°6	66°6
12	57°1	58°4	63°4	66°5	70°1	70°3	70°1	70°7	70°7	70°3	66°8	68°1
13	62°8	65°4	70°1	69°7	71°1	70°7	69°7	69°2	71°1	69°2	69°5	69°1
14	65°8	68°3	69°9	71°4	73°7	73°7	74°0	75°1	72°7	74°7	72°7	72°7
15	—	—	—	—	—	—	—	—	—	—	—	—
16	67°1	69°4	70°5	71°0	70°2	74°3	74°0	74°2	73°7	73°7	74°7	75°1
17	64°3	71°3	72°1	72°6	73°3	70°7	71°7	69°2	70°1	69°5	68°5	69°3
18	53°7	55°5	55°5	56°1	56°3	55°9	56°7	58°9	57°3	58°0	55°7	53°3
19	44°9	47°7	51°4	50°6	53°1	52°3	53°2	53°4	53°9	55°4	54°1	53°9
20	52°1	55°7	58°4	59°0	60°7	61°5	62°6	61°0	61°2	59°8	62°6	57°8
21	50°6	52°0	54°6	57°1	56°6	57°3	58°2	58°9	59°9	60°2	59°2	61°2
22	—	—	—	—	—	—	—	—	—	—	—	—
23	50°7	55°2	58°0	58°8	57°3	59°2	61°0	62°0	63°0	64°8	63°3	63°1
24	51°0	54°9	57°2	61°0	61°6	62°4	63°8	62°6	62°1	61°4	61°5	62°0
25	50°4	54°1	61°2	63°5	64°6	64°1	63°2	62°4	62°7	62°2	61°0	60°8
26	52°5	56°9	61°0	63°9	65°0	68°7	66°9	69°1	68°3	69°0	68°1	65°8
27	54°5	54°8	55°1	56°1	55°9	56°8	57°3	55°8	59°0	59°1	59°3	60°2
28	46°5	52°0	58°5	60°8	61°8	60°8	61°4	60°0	60°9	60°0	61°2	62°3
29	—	—	—	—	—	—	—	—	—	—	—	—
30	58°0	63°0	63°6	66°0	66°3	66°8	66°0	66°5	65°8	64°6	62°8	63°0
31	50°0	52°7	54°0	52°5	53°7	53°5	54°5	54°9	54°7	56°7	56°8	55°7
Hourly Means	56°14	59°14	61°71	63°12	64°05	64°68	65°01	65°13	65°04	64°99	64°64	64°13

9	10	11
3	4	5
61.2	61.2	61.6
69.0	69.3	69.7
70.2	70.9	71.6
71.7	67.1	65.9
72.7	75.6	70.0
73.2	72.4	73.5
71.9	71.1	71.9
72.1	70.0	69.1
70.5	70.1	68.7
73.7	74.1	72.7
68.7	67.7	65.6
60.4	61.0	60.8
68.9	68.3	67.3
71.9	71.7	70.5
72.7	74.3	71.9
77.2	77.0	76.4
76.1	73.3	72.7
73.5	73.3	72.5
66.0	65.6	65.6
65.0	66.6	66.2
66.6	65.6	64.0
53.3	51.7	52.7
56.1	57.3	58.2
57.2	57.7	56.5
65.7	63.6	63.1
62.8	62.6	62.8
62.3	62.8	59.5
67.99	67.29	66.93
64.9	66.1	62.8
62.7	61.8	65.8
67.5	67.1	66.8
65.4	65.2	64.4
69.4	66.8	64.0
63.1	65.2	63.9
70.6	69.6	69.1
70.9	70.9	70.3
65.6	66.6	66.6
70.3	66.8	68.1
69.2	69.5	69.1
71.7	72.7	72.7
73.7	71.7	73.1
69.5	68.5	69.3
58.0	55.7	53.3
55.4	51.1	53.9
59.8	62.6	57.8
60.2	59.2	61.2
61.8	63.3	63.1
61.4	61.5	62.0
62.2	61.0	60.8
69.0	68.1	65.8
59.1	59.3	60.2
60.0	61.2	62.3
61.6	62.8	63.0
56.7	56.8	55.7
64.99	64.64	64.13

WET THERMOMETER.												Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	
6	7	8	9	10	11	12	13	14	15	16	17	
63.6	61.6	58.6	55.7	53.9	53.6	51.3	52.6	53.5	53.2	52.6	51.2	50.8
69.4	64.8	62.0	60.0	59.1	58.3	56.5	55.9	55.3	54.8	53.3	53.5	53.5
70.5	67.3	61.2	59.6	57.1	56.6	—	—	—	—	—	—	—
66.6	66.3	66.4	65.6	65.1	63.8	64.2	63.2	62.6	62.6	62.2	62.0	62.0
68.8	67.8	64.6	63.6	62.6	62.4	63.0	61.6	60.4	61.1	60.6	60.9	60.9
70.7	68.5	66.4	64.6	64.0	63.7	64.5	63.5	61.1	60.8	61.8	61.8	61.8
70.9	71.6	68.5	66.6	65.7	66.0	65.7	65.1	64.8	63.4	62.8	63.1	63.1
69.3	68.5	66.8	66.5	65.8	65.2	65.2	64.8	65.8	65.6	65.2	65.0	65.0
68.8	66.6	67.2	66.6	66.6	66.0	—	—	—	—	—	—	—
74.3	73.1	70.3	68.3	66.8	66.6	66.4	65.6	64.6	64.6	64.2	64.2	64.2
61.0	61.4	59.6	58.1	57.5	56.8	56.3	55.1	54.0	53.1	52.1	51.7	51.7
62.2	59.4	56.7	54.7	53.1	52.0	50.8	50.4	49.8	49.4	51.1	50.6	50.6
65.7	66.2	65.8	65.8	65.9	64.3	64.0	59.6	59.8	58.6	58.2	57.9	57.9
68.3	70.5	67.3	66.5	66.4	66.0	66.2	66.4	66.3	64.8	64.6	65.8	65.8
76.3	76.3	72.9	72.1	72.5	72.3	—	—	—	—	—	—	—
70.1	71.1	68.9	67.5	67.3	67.9	68.1	66.6	66.7	67.0	66.8	66.4	66.4
70.6	70.3	69.5	69.7	69.8	69.3	69.2	68.7	67.6	68.7	67.6	67.7	67.7
70.1	68.7	67.3	65.6	65.6	64.6	65.2	65.3	65.0	66.1	66.5	67.3	67.3
64.0	61.7	59.8	59.0	56.3	54.6	53.1	51.2	50.5	49.6	47.8	47.8	47.8
65.6	62.8	60.0	57.5	56.1	55.4	54.5	54.5	53.9	53.0	52.6	52.9	52.9
65.6	63.0	62.5	63.0	63.6	64.0	—	—	—	—	—	—	—
51.8	50.9	50.7	48.6	48.5	45.2	44.9	44.6	44.0	43.9	42.2	42.6	42.6
58.1	56.1	52.3	50.3	49.8	47.5	46.9	47.3	45.9	45.0	45.4	44.6	44.6
53.7	55.3	53.7	51.4	51.0	50.6	50.6	51.3	51.4	50.2	48.8	48.2	48.2
62.8	61.8	61.4	61.0	61.8	61.0	60.0	58.0	57.2	55.0	54.5	54.2	54.2
62.6	61.0	59.0	58.6	57.1	55.9	54.9	52.4	53.0	49.8	48.0	47.8	47.8
59.1	55.4	58.0	56.6	55.0	53.6	—	—	—	—	—	—	—
66.23	64.74	62.98	61.61	60.81	60.12	59.79	59.01	58.55	57.85	57.09	57.02	57.02
63.8	62.1	58.7	57.1	56.7	53.7	53.1	49.8	49.8	50.3	48.2	47.7	47.7
65.0	62.8	59.0	55.5	53.3	53.1	52.3	52.3	51.1	51.2	50.3	50.6	50.6
66.8	65.8	61.2	57.5	56.1	55.7	56.1	55.1	54.7	55.1	54.7	55.7	55.7
63.4	62.6	61.2	60.0	60.0	59.6	60.2	61.0	61.0	60.9	60.7	59.8	59.8
62.0	62.8	61.6	63.2	63.4	64.2	64.8	64.0	63.1	60.8	58.2	56.7	56.7
63.8	61.9	60.0	58.8	59.2	58.7	—	—	—	—	—	—	—
66.3	67.0	66.2	66.1	66.6	65.6	64.6	64.4	64.4	61.2	61.0	61.6	61.6
68.2	67.7	67.4	67.3	68.8	66.8	66.1	64.9	64.6	64.3	62.2	63.1	63.1
67.3	64.6	63.0	61.4	60.2	59.8	59.6	58.7	58.6	58.9	57.2	56.7	56.7
68.2	66.1	66.2	65.8	65.7	65.6	64.9	64.7	64.0	61.6	61.8	61.8	61.8
71.2	69.4	68.5	67.9	67.7	65.6	65.0	66.1	66.3	66.1	65.6	66.0	66.0
70.3	69.7	68.1	67.2	66.2	66.2	—	—	—	—	—	—	—
74.3	70.9	68.4	67.3	65.8	65.2	64.8	64.8	64.1	63.4	63.2	63.6	63.6
67.9	66.6	64.8	64.2	59.9	59.5	57.0	55.5	53.8	53.0	55.6	53.7	53.7
59.7	51.0	50.0	48.8	48.2	47.3	46.8	45.9	46.3	47.3	47.3	43.0	43.0
55.3	55.1	52.5	49.7	51.1	50.9	51.8	50.6	50.0	48.6	49.2	50.0	51.6
58.2	56.7	55.9	55.3	55.1	53.7	54.0	52.7	52.5	51.4	50.2	49.4	49.4
60.0	59.0	55.2	54.1	53.5	52.4	—	—	—	—	—	—	—
61.6	58.4	55.5	54.7	53.3	52.1	50.9	51.0	50.9	50.7	48.7	48.5	48.5
62.1	58.0	55.1	53.9	52.6	52.8	52.5	52.1	51.3	51.3	49.8	50.1	50.1
59.7	57.8	55.7	55.3	55.0	54.8	54.4	52.9	52.3	52.1	52.2	50.6	50.6
61.8	62.8	62.0	62.1	62.0	63.1	62.3	61.8	62.6	60.0	58.6	54.5	54.5
60.6	55.7	56.9	55.1	53.5	52.3	51.6	50.8	48.4	46.4	47.0	47.7	47.7
60.6	57.4	56.5	55.4	55.5	54.1	—	—	—	—	—	—	—
62.6	61.2	59.0	58.6	57.8	56.0	54.2	53.6	52.7	49.2	48.6	47.8	47.8
55.5	52.4	50.0	48.2	47.3	47.5	46.9	45.9	44.7	47.1	47.3	48.8	48.8
63.66	61.75	60.02	58.89	58.11	57.33	57.25	56.53	56.01	55.46	55.02	54.59	54.59

		WET THERMOMETER.											
Hour of Mean Sighting Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Tomb's Time.	18	19	20	21	22	23	0	1	2	3	4	5	
SEPTEMBER.	1	49.8	50.8	51.1	51.9	52.4	52.5	52.8	60.2	59.5	59.2	59.6	60.2
	2	48.9	51.1	51.0	61.7	63.5	61.0	63.6	63.4	65.4	66.0	66.5	65.4
	3	56.8	61.9	63.1	63.1	67.1	69.1	69.1	66.9	69.5	68.5	66.9	61.2
	4	53.7	53.7	53.5	51.2	54.7	55.2	55.2	55.7	55.7	56.3	56.3	56.8
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	48.2	50.3	53.5	59.0	60.2	60.8	60.6	61.4	61.3	62.4	60.5	60.3
	7	52.1	58.0	60.6	60.0	59.7	59.7	59.8	60.8	59.8	59.9	59.8	60.0
	8	63.0	61.0	65.6	66.6	69.0	69.6	69.9	68.9	69.6	68.8	68.7	69.2
	9	49.3	49.1	49.7	49.3	50.8	50.6	51.4	53.3	55.5	55.5	55.5	55.1
	10	44.0	49.0	51.7	56.2	56.5	56.5	57.9	56.3	57.5	57.5	58.1	58.0
	11	46.5	50.8	51.5	58.5	58.0	58.6	57.2	57.4	56.5	51.1	51.0	51.1
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	52.7	51.4	50.6	50.9	50.8	50.1	50.5	50.6	48.8	47.8	46.5	45.9
	14	43.4	43.8	41.2	41.9	45.8	45.3	45.8	45.9	47.2	47.2	48.4	45.7
	15	37.2	41.3	43.4	45.3	46.6	47.8	48.5	49.3	52.0	52.2	52.1	53.0
	16	37.8	42.8	48.5	49.8	53.1	53.7	54.3	51.5	55.3	55.2	55.3	54.0
	17	49.4	49.8	53.9	56.3	58.3	58.4	58.0	60.7	56.5	56.8	55.9	55.0
	18	55.9	57.1	58.3	58.6	59.6	59.4	60.0	57.1	59.4	59.4	58.1	57.4
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	53.5	51.0	51.7	51.7	51.9	55.1	55.3	55.5	55.1	55.1	54.1	55.7
	21	50.5	52.6	51.0	55.1	55.5	56.3	57.3	56.2	56.3	51.9	53.7	53.1
	22	41.2	47.5	50.6	51.6	56.3	56.3	56.0	51.9	51.5	53.9	55.5	53.3
	23	49.6	52.3	56.9	59.0	59.7	61.6	61.5	62.2	62.8	61.8	62.2	62.3
	24	—	52.5	52.5	52.5	52.9	52.7	53.7	53.9	53.7	53.9	51.0	51.1
	25	47.1	47.5	48.5	50.7	52.6	53.9	56.0	55.2	51.6	—	—	53.6
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	37.3	38.4	59.2	60.0	61.7	63.2	64.7	65.3	61.8	61.9	65.2	61.6
	28	47.7	48.1	50.7	50.6	51.4	52.1	52.5	49.2	48.8	48.2	47.1	47.6
	29	—	42.9	45.3	47.5	50.6	46.1	49.3	50.8	45.2	45.5	46.9	47.0
	30	38.1	40.5	43.0	46.1	48.2	48.0	50.0	49.0	47.1	47.4	48.4	48.1
Hourly Means	48.86	50.93	51.07	51.54	56.00	56.30	56.81	56.79	56.63	56.42	56.29	55.87	
OCTOBER.	1	43.3	41.4	45.6	45.3	45.4	46.8	47.1	47.3	46.9	46.9	46.6	46.2
	2	38.2	40.6	41.8	46.5	48.2	48.3	47.7	48.2	51.0	51.5	49.9	49.3
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	40.3	43.7	50.9	55.2	56.0	56.9	57.1	56.1	55.7	51.3	55.1	54.3
	5	56.6	57.6	58.1	59.3	58.6	59.5	61.6	61.3	61.3	61.9	60.0	58.8
	6	55.8	55.9	56.0	56.1	55.8	55.8	56.1	55.8	55.7	55.7	55.8	56.2
	7	54.2	53.9	54.9	53.7	54.2	53.7	54.0	54.1	54.7	54.7	55.2	55.0
	8	54.9	54.7	54.9	55.2	56.2	56.7	57.1	55.9	55.7	55.7	56.0	55.1
	9	39.5	43.0	45.3	47.8	49.6	49.1	49.1	51.6	53.4	52.8	53.3	53.1
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	36.3	36.8	37.8	38.6	39.4	40.2	40.6	41.0	42.1	42.8	42.4	42.1
	12	39.3	40.6	42.2	43.5	44.7	44.7	43.4	42.9	42.6	42.5	42.7	43.0
	13	36.9	37.5	38.9	38.6	39.5	39.9	39.9	39.5	39.5	38.8	38.8	36.6
	14	33.7	33.9	33.9	35.7	36.7	36.1	36.1	35.2	36.0	35.6	34.3	32.3
	15	28.7	29.2	31.6	33.3	34.3	38.5	38.4	38.6	39.3	39.1	37.8	37.7
	16	41.4	42.2	43.9	44.8	46.0	46.7	47.5	49.6	50.3	50.5	49.9	49.1
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	38.8	40.1	41.6	48.2	52.0	53.8	56.7	57.5	57.3	56.9	59.1	55.4
	19	41.9	43.7	43.5	46.1	47.7	47.9	45.1	41.5	45.4	45.4	43.7	42.7
	20	28.9	30.9	36.0	41.3	45.4	45.5	45.0	45.8	44.7	44.4	43.1	40.1
	21	32.8	33.6	36.0	38.6	39.7	41.3	41.1	40.4	40.3	40.4	40.4	40.2
	22	37.2	37.3	37.2	37.0	37.5	37.6	37.2	37.8	38.4	39.2	39.4	38.7
	23	35.0	34.4	36.8	40.8	42.6	43.6	46.5	46.4	45.8	46.3	46.0	41.3
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	45.4	45.2	45.6	46.4	44.1	43.0	42.7	42.1	40.0	37.4	34.1	32.4
	26	27.1	30.5	31.9	28.8	28.9	28.6	29.2	28.5	27.8	27.5	25.9	24.7
	27	17.6	17.2	19.0	25.6	27.0	28.0	30.4	31.5	31.8	32.8	30.5	30.1
	28	24.5	25.5	30.0	31.6	33.1	36.6	35.8	36.4	37.1	36.9	35.9	34.5
	29	27.0	31.9	32.6	39.0	42.2	43.9	44.6	44.8	45.0	44.7	44.9	42.4
	30	33.5	33.3	36.0	42.7	45.6	46.9	46.7	47.5	47.1	46.9	44.2	41.1
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	38.01	39.02	41.04	43.07	44.09	44.87	45.27	45.41	45.59	45.45	44.82	43.79	

WET THERMOMETER.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
59.2	59.6	60.2	60.1	56.4	54.1	53.4	52.9	52.7	51.9	50.8	50.3	50.6	50.3	49.0	54.99
66.0	66.5	67.4	64.0	62.0	63.0	63.2	60.8	59.0	58.0	55.9	55.4	53.7	55.0	54.8	60.26
68.5	66.9	61.2	58.8	56.5	55.7	55.8	55.5	54.5	53.9	53.5	54.1	54.1	54.1	54.1	60.16
56.3	56.3	56.8	57.1	57.4	58.1	58.7	58.8	59.0	—	—	—	—	—	—	53.92
—	—	—	—	—	—	—	—	—	48.4	47.5	47.3	46.9	46.9	46.9	53.92
62.4	60.5	60.3	59.3	58.0	56.3	56.3	56.0	54.3	54.3	52.9	52.1	51.1	50.8	50.8	56.28
59.9	59.8	60.0	58.8	59.2	58.6	60.8	61.4	61.0	61.2	61.6	61.4	61.6	61.8	62.1	59.99
68.8	68.7	69.2	66.9	66.0	65.5	65.6	57.4	57.7	53.5	52.5	52.7	52.5	49.6	48.0	62.37
55.5	55.5	55.1	54.7	53.5	53.7	50.6	49.2	47.3	45.2	43.9	43.9	43.3	43.0	43.0	49.93
57.5	58.1	58.0	56.5	52.4	50.6	49.6	48.7	48.0	47.8	47.7	47.1	46.2	45.7	45.9	51.89
51.1	51.0	51.1	51.2	50.4	49.2	49.2	49.0	48.8	—	—	—	—	—	—	53.57
—	—	—	—	—	—	—	—	—	51.5	51.2	53.7	53.7	53.9	54.3	—
47.8	46.5	45.9	45.1	44.4	43.4	42.8	42.4	42.4	42.4	42.6	42.8	43.0	43.4	43.3	46.44
47.2	48.4	45.7	45.1	42.4	41.7	41.1	41.5	40.9	40.3	39.0	38.4	37.4	38.0	37.5	42.93
52.2	52.1	53.0	52.3	48.2	46.7	45.2	45.7	45.1	44.2	42.2	40.1	39.1	38.3	38.0	45.63
55.2	55.3	54.0	52.3	49.5	48.2	47.0	47.6	48.2	48.2	48.5	48.5	48.0	48.8	49.4	49.95
56.8	55.9	55.0	54.2	51.1	51.0	51.7	53.3	53.3	53.1	58.1	57.1	56.7	56.1	56.3	55.30
59.4	58.1	57.3	56.6	58.2	58.2	57.5	57.4	57.7	—	—	—	—	—	—	57.09
—	—	—	—	—	—	—	—	—	53.5	51.5	53.7	53.7	53.5	53.5	—
55.1	54.1	55.7	54.5	51.8	51.9	51.6	51.2	50.6	50.6	51.8	51.8	51.0	52.5	51.5	53.28
51.9	53.7	53.1	53.6	48.8	47.5	47.1	46.7	46.7	45.7	43.8	43.0	43.9	43.0	43.8	50.50
53.9	55.5	55.3	52.3	50.9	49.4	48.6	50.1	48.1	47.2	45.7	45.3	44.9	45.1	45.3	50.40
61.8	62.2	62.3	60.0	58.9	58.8	57.8	56.4	55.7	57.4	55.5	55.0	54.2	53.4	52.7	57.82
53.9	51.0	54.1	53.9	53.7	53.7	53.4	53.2	52.3	52.1	52.0	51.3	49.2	47.7	47.1	52.45
51.1	51.7	53.9	53.5	53.3	53.3	52.7	52.5	51.3	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	55.9	57.1	57.4	58.0	57.1	57.1	53.61
64.9	65.2	61.0	62.6	60.9	60.6	56.5	54.8	51.9	49.1	47.8	47.1	45.8	45.7	45.3	57.37
48.2	47.1	47.6	46.6	46.2	44.7	43.6	43.8	42.5	41.4	41.1	41.0	42.0	42.2	42.5	46.25
45.5	46.9	47.0	43.7	45.2	44.9	43.4	43.0	43.6	42.0	39.9	40.3	37.8	38.4	41.48	—
47.4	48.1	48.1	47.8	44.3	43.7	42.8	44.0	44.9	47.3	47.1	46.9	46.9	44.3	44.3	45.89
56.42	56.29	53.87	51.75	53.18	52.52	51.92	51.28	50.52	50.03	49.56	49.13	48.76	48.55	48.27	52.79
46.9	46.6	46.2	44.6	44.8	44.1	38.4	39.5	39.3	38.5	37.0	37.6	38.8	38.2	38.1	42.71
51.5	49.9	49.3	45.8	44.1	43.6	45.4	45.3	43.0	—	—	—	—	—	—	45.59
51.3	55.1	51.3	51.5	54.6	54.7	54.3	53.2	53.1	53.6	53.5	52.8	53.5	53.6	55.4	53.43
61.9	60.0	58.8	57.9	57.7	57.7	57.6	56.8	56.6	56.6	56.6	56.4	56.1	56.2	55.7	58.29
55.7	55.8	56.2	56.1	56.3	56.1	56.1	56.2	55.6	55.3	54.9	54.9	54.7	54.5	54.6	55.69
51.7	53.2	53.0	53.4	55.7	55.9	55.2	55.0	54.5	54.4	54.8	54.5	54.3	53.7	55.1	54.68
55.7	50.0	53.1	54.0	53.9	51.2	48.4	47.1	46.8	46.0	45.3	44.0	43.1	41.6	41.3	54.28
52.8	53.3	53.1	51.5	51.0	51.3	51.8	50.5	49.9	—	—	—	—	—	—	46.97
—	—	—	—	—	—	—	—	—	40.3	39.5	38.8	38.8	38.9	37.3	—
42.8	42.1	42.1	41.6	39.5	40.4	39.3	38.6	37.1	36.9	36.7	37.6	37.6	39.1	39.5	39.33
42.5	42.7	43.0	43.1	42.9	42.2	42.1	41.9	42.1	41.1	39.5	38.8	38.0	37.5	37.3	41.62
38.8	38.8	36.6	37.3	35.3	33.9	32.9	32.1	31.3	30.9	32.3	32.9	33.4	34.2	34.3	35.97
35.6	34.3	32.3	33.9	30.4	29.4	28.8	28.2	28.0	26.1	25.9	26.0	27.5	27.7	28.2	31.54
39.1	37.8	37.2	36.6	39.0	38.8	38.5	40.0	41.0	41.0	40.9	40.8	41.0	41.0	40.5	37.72
50.5	49.9	49.1	49.5	50.4	50.3	49.7	49.7	49.9	—	—	—	—	—	—	45.40
—	—	—	—	—	—	—	—	—	39.6	38.4	38.5	37.6	37.1	37.1	—
56.9	56.1	53.4	56.7	54.5	53.9	52.9	50.9	50.3	49.5	48.2	47.2	44.9	42.1	41.3	50.42
45.4	43.7	43.7	42.1	39.5	39.2	37.4	36.1	35.1	32.2	31.4	29.7	30.0	30.0	29.6	39.07
41.4	43.1	40.1	38.2	36.7	37.3	37.0	36.0	34.9	34.3	29.5	28.9	29.8	29.6	32.4	37.11
40.4	40.4	40.2	40.3	40.1	39.7	39.3	39.4	38.1	37.9	37.8	37.4	37.4	37.2	37.4	38.62
39.2	39.4	38.7	38.9	38.6	38.6	38.4	38.0	38.1	38.2	35.2	34.4	33.4	33.9	35.8	37.33
46.3	46.0	44.3	43.5	39.8	39.4	38.1	37.2	37.1	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	46.3	46.3	45.8	45.7	45.7	45.5	42.45
37.4	34.1	32.4	31.9	31.4	31.3	30.5	30.5	29.7	28.9	28.6	28.1	27.8	27.6	26.5	35.49
27.5	25.9	24.7	24.4	20.8	20.0	19.4	18.8	18.0	17.5	16.5	16.8	16.8	17.0	16.8	23.31
32.8	30.5	30.1	29.6	31.9	30.6	29.0	29.0	26.8	26.5	26.0	25.9	25.9	25.9	25.5	27.26
36.9	35.9	34.5	33.8	33.6	32.7	29.4	28.1	28.0	27.5	26.9	27.3	26.9	26.7	26.8	31.11
44.7	44.9	42.4	41.3	39.7	39.4	36.7	35.4	34.1	33.6	33.1	32.3	32.1	32.4	32.9	37.75
47.1	46.9	44.2	41.8	42.7	39.3	37.5	35.3	35.1	—	—	—	—	—	—	43.05
—	—	—	—	—	—	—	—	—	46.9	46.9	46.9	47.6	47.6	47.6	—
45.45	44.82	43.79	42.95	42.39	41.86	40.93	40.34	39.63	39.35	38.75	38.37	38.34	38.13	38.26	41.65



WET THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
NOVEMBER.	1	47.7	48.3	49.1	50.1	51.6	52.6	54.1	53.9	53.3	52.1	50.8	49.3
	2	49.4	49.4	50.5	51.6	52.6	53.9	54.1	55.9	53.7	53.4	52.9	50.7
	3	45.6	45.8	52.1	52.9	52.3	51.9	53.6	53.5	54.0	53.3	53.3	52.6
	4	41.6	41.2	44.5	44.2	45.6	48.5	48.0	47.8	47.3	45.8	45.5	43.3
	5	34.6	34.5	36.4	37.9	39.5	40.1	40.0	40.4	40.0	39.2	38.6	37.3
	6	30.8	29.0	31.7	33.7	34.7	35.3	35.3	35.0	35.2	35.8	36.1	35.3
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	45.0	45.5	46.0	45.7	46.0	46.4	46.7	48.1	47.9	48.4	48.3	48.2
	9	50.6	50.6	52.7	53.3	54.7	51.5	49.1	47.5	47.2	47.1	45.8	43.2
	10	34.8	35.0	35.4	36.3	36.9	35.7	36.0	35.8	35.6	35.5	35.6	34.8
	11	33.2	33.6	33.6	34.0	34.5	34.8	34.8	34.8	34.8	34.4	34.4	34.1
	12	30.8	29.5	31.0	34.6	35.9	36.0	36.2	36.2	35.5	36.2	35.6	34.8
	13	33.4	33.0	33.7	35.4	36.0	36.4	37.2	37.9	38.5	37.5	37.2	36.9
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	37.1	37.2	37.4	38.1	38.7	38.9	38.7	37.9	37.2	36.9	36.7	37.0
	16	28.0	27.4	30.4	35.6	37.7	39.3	42.0	43.1	44.6	45.2	44.0	43.2
	17	43.2	43.1	33.6	44.5	46.1	47.3	47.4	47.9	47.6	48.4	47.6	47.1
	18	42.2	42.0	42.0	42.2	42.7	42.8	42.9	42.8	43.2	44.0	45.4	46.0
	19	31.6	31.4	29.4	28.4	27.9	26.9	27.2	26.6	26.9	26.9	26.1	25.8
	20	19.2	19.2	20.4	23.0	25.8	26.9	27.4	28.1	28.6	28.4	28.0	27.2
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	35.8	36.2	36.2	38.2	40.2	42.7	43.7	44.3	43.3	42.9	41.5	40.2
	23	41.8	42.1	42.7	44.1	45.7	47.7	49.5	50.5	50.2	50.7	50.6	51.2
	24	18.0	45.7	46.0	46.4	48.3	49.6	48.4	48.7	48.8	47.8	47.7	47.1
	25	40.0	40.0	39.6	41.4	41.1	41.1	39.9	39.4	38.8	38.4	38.2	36.9
	26	26.0	25.4	25.2	25.1	25.1	25.1	25.2	25.8	25.8	25.6	24.8	23.5
	27	23.8	24.6	25.6	26.3	26.5	26.9	26.9	26.2	30.5	30.5	29.4	29.1
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	10.0	9.8	10.3	10.4	11.4	13.4	13.4	13.8	15.2	15.6	15.6	14.9
	30	18.4	18.2	20.6	22.2	23.1	23.7	24.2	24.6	25.3	24.7	23.2	22.5
Hourly Means	35.48	35.30	36.39	37.52	38.48	39.05	39.30	39.60	39.56	39.39	38.96	38.13	
DECEMBER.	1	31.9	33.2	33.4	33.6	34.2	35.1	36.5	36.3	37.5	37.3	36.4	35.2
	2	35.4	34.6	34.5	35.5	36.2	36.7	37.5	37.4	36.2	36.7	36.2	34.7
	3	33.0	33.0	33.0	33.0	33.0	33.2	32.9	32.9	31.7	30.5	30.3	29.3
	4	26.0	25.7	25.7	27.2	27.4	29.4	30.3	30.3	30.0	30.2	29.8	29.0
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	26.3	26.7	27.0	28.6	30.5	29.6	31.3	31.7	33.2	32.4	32.4	30.1
	7	31.7	31.7	31.2	33.2	34.7	36.0	36.5	36.7	37.3	37.2	37.1	34.6
	8	35.4	34.7	35.8	37.2	39.6	41.3	42.2	42.8	42.3	42.8	42.6	42.1
	9	36.0	36.0	35.6	36.0	36.5	37.5	38.3	38.8	39.7	41.9	42.5	43.3
	10	47.2	46.1	46.2	46.3	47.3	46.9	46.9	46.7	46.9	43.7	42.5	41.0
	11	33.8	34.2	34.7	35.2	35.8	35.7	33.6	34.1	34.5	34.4	34.1	32.1
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	36.8	36.7	35.8	35.9	35.9	36.0	36.3	36.0	35.2	34.1	34.0	33.6
	14	31.5	31.6	31.9	32.5	32.8	33.0	33.0	33.0	32.9	33.0	33.0	32.9
	15	32.8	29.4	27.8	28.6	28.1	29.4	30.9	29.2	29.3	29.5	28.2	27.1
	16	12.9	12.9	13.3	13.3	14.6	15.3	16.5	17.2	18.2	18.6	19.6	20.0
	17	16.0	16.6	17.1	17.7	18.2	19.8	22.1	24.6	25.8	26.2	26.4	25.3
	18	14.0	14.3	15.4	19.0	22.5	24.8	26.9	29.4	30.3	30.3	31.4	32.0
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	13.3	13.3	12.7	12.4	13.1	13.4	13.8	14.4	14.8	14.4	13.1	11.1
	21	11.1	10.2	9.8	10.4	13.2	16.4	17.1	17.7	18.2	19.4	20.5	20.8
	22	20.8	20.6	20.6	21.4	22.4	23.5	23.2	23.3	23.5	23.7	23.8	22.5
	23	17.7	17.8	19.6	19.4	19.6	21.8	23.1	23.5	24.1	24.3	23.6	23.3
	24	20.4	20.0	19.9	21.4	21.6	20.0	19.9	20.4	20.3	20.3	20.4	19.8
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	12.9	12.2	11.3	12.2	15.3	15.8	18.3	17.7	18.6	19.2	18.9	19.6
	28	29.6	30.5	30.8	32.3	32.8	32.9	33.3	33.4	33.6	34.1	34.1	34.6
	29	36.9	37.6	37.5	38.6	40.2	40.2	41.2	40.8	40.6	40.5	40.8	40.6
	30	40.6	39.8	40.0	42.0	42.5	43.3	44.7	45.0	44.7	43.7	43.7	43.1
	31	42.6	42.1	42.3	42.7	44.3	45.4	44.6	44.7	44.9	44.3	44.3	44.0
Hourly Means	27.92	27.75	27.80	28.68	29.70	30.49	31.19	31.46	31.70	31.63	31.50	30.92	

<sup>a</sup> Christmas Day.

WET THERMOMETER.

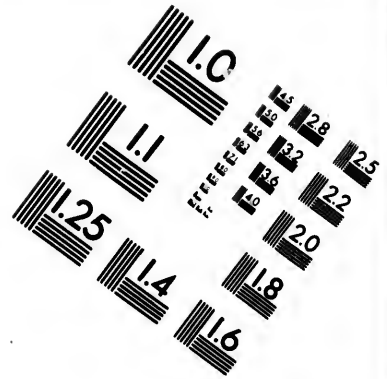
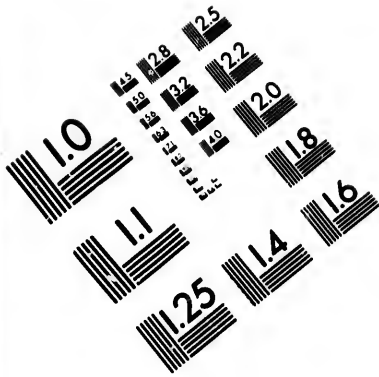
9	10	11
3	4	5
52.1	50.8	49.3
53.4	52.9	50.7
53.3	53.3	52.6
45.8	45.5	43.3
39.2	38.6	37.3
35.8	36.1	35.3
—	—	—
48.1	48.3	48.2
17.1	45.8	43.2
35.5	35.6	34.8
31.4	31.4	31.1
36.2	35.6	34.8
37.5	37.2	36.9
—	—	—
36.9	36.7	37.0
45.2	44.0	43.2
48.1	47.6	47.4
41.0	45.4	46.0
26.9	26.1	25.8
28.4	28.0	27.2
—	—	—
42.9	41.5	40.2
50.7	50.6	51.2
47.8	47.7	47.1
38.4	38.2	36.9
25.6	24.8	23.5
30.5	29.4	29.1
—	—	—
15.6	15.6	15.9
24.7	23.2	22.5
37.39	38.96	38.14
—	—	—
37.3	36.1	35.2
56.7	36.2	34.7
30.5	30.3	29.7
30.2	29.8	29.0
—	—	—
32.4	32.1	30.4
37.2	37.1	34.6
42.8	42.6	42.4
41.9	42.5	43.3
43.7	42.5	41.0
34.4	34.1	32.1
—	—	—
34.1	34.0	33.6
33.0	33.0	32.9
29.5	28.2	27.4
18.6	19.6	20.0
26.2	26.4	25.3
30.3	31.1	32.0
—	—	—
14.1	13.1	11.1
19.4	20.5	20.8
23.7	23.8	22.5
24.3	23.6	23.3
20.3	20.1	19.8
—	—	—
19.2	18.9	19.6
34.1	34.4	34.6
40.5	40.8	40.6
43.7	43.7	43.1
44.3	44.3	44.0
—	—	—
31.63	31.50	30.92

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
46.9	47.8	49.0	49.9	48.8	49.2	49.2	50.4	49.1	49.0	49.4	49.5	50.05
49.6	48.8	49.8	51.8	50.8	49.9	49.4	49.2	49.3	48.9	47.2	46.8	50.82
53.4	51.8	51.9	52.5	52.3	48.3	47.6	47.6	45.0	44.2	42.5	41.2	49.97
40.9	39.5	39.4	36.2	37.6	36.3	35.7	35.5	34.4	33.6	34.0	35.1	40.89
33.7	34.6	33.6	33.6	33.8	34.2	33.8	33.3	32.0	32.3	21.9	31.4	35.82
32.5	30.2	29.1	29.4	29.4	29.1	—	—	—	—	—	—	—
—	—	—	—	—	—	43.3	43.2	43.7	44.1	44.4	44.6	35.45
48.2	48.1	48.2	47.7	47.6	47.8	48.8	48.8	48.8	50.3	50.3	51.3	47.83
41.7	39.6	38.6	38.8	37.6	37.2	37.4	34.8	33.9	34.5	34.8	35.0	43.22
34.4	34.4	34.2	33.6	34.0	34.1	33.6	33.6	33.6	33.4	33.2	33.1	34.69
33.7	33.2	33.2	33.4	33.4	33.4	33.4	32.8	33.0	32.6	31.2	31.8	33.69
34.6	34.2	34.2	34.0	34.1	34.0	34.0	34.2	34.5	34.9	35.0	35.0	34.37
37.9	38.3	38.5	38.7	39.1	38.4	—	—	—	—	—	—	—
—	—	—	—	—	—	37.1	37.1	37.1	36.5	36.0	36.9	36.86
36.7	36.5	35.8	34.7	33.0	32.4	32.3	32.1	31.5	29.4	29.4	29.0	35.18
42.8	43.7	43.7	42.7	42.7	45.0	43.9	44.0	43.9	44.3	43.6	42.9	40.99
46.1	45.7	45.5	45.6	45.2	44.9	44.3	44.3	43.9	43.7	43.7	42.8	45.40
45.6	45.7	45.7	48.9	46.2	44.5	43.7	40.9	39.6	38.4	35.0	34.2	42.78
25.5	25.4	24.9	24.7	24.6	23.4	22.7	22.1	21.9	21.0	20.7	19.4	25.47
28.2	30.2	31.0	31.1	30.7	29.8	—	—	—	—	—	—	—
—	—	—	—	—	—	32.9	32.9	34.1	35.4	35.8	36.0	28.76
39.8	40.1	39.9	40.4	40.5	40.8	42.3	41.4	41.6	41.8	41.8	41.4	40.71
50.6	50.8	50.3	50.3	50.7	50.3	49.8	49.3	48.7	50.1	49.5	49.5	48.61
43.2	43.5	43.1	42.3	41.8	41.4	41.4	41.2	40.9	40.7	40.5	40.6	41.79
37.0	36.5	35.8	35.8	34.6	33.2	32.8	30.9	30.5	30.3	27.2	26.2	36.07
23.2	22.6	22.8	21.8	21.6	20.9	20.2	20.9	21.8	22.1	22.1	24.2	23.62
29.1	29.6	29.4	30.2	29.7	29.3	—	—	—	—	—	—	—
—	—	—	—	—	—	10.9	10.1	9.8	9.4	8.8	8.6	23.62
13.0	12.3	12.3	12.8	13.5	14.9	15.6	17.9	17.4	16.5	18.1	18.1	13.97
22.5	23.7	24.6	26.2	28.2	29.4	28.5	28.6	26.1	24.1	24.5	24.5	24.23
—	—	—	—	—	—	—	—	—	—	—	—	—
37.49	37.18	37.10	37.20	36.98	36.61	36.33	36.05	35.66	35.44	35.02	34.97	37.22
—	—	—	—	—	—	—	—	—	—	—	—	—
34.8	34.0	34.0	33.8	34.6	35.8	36.7	36.8	36.0	35.8	35.6	35.2	35.18
35.1	35.1	35.1	34.6	34.2	33.2	32.8	33.1	32.9	33.1	33.2	33.6	34.86
29.1	28.5	28.3	27.9	27.8	27.6	26.9	26.8	27.0	26.7	26.2	26.1	29.79
30.2	31.2	32.0	33.2	34.2	35.0	—	—	—	—	—	—	—
—	—	—	—	—	—	26.6	26.0	26.0	25.5	24.8	25.9	28.73
27.6	29.6	28.4	28.4	31.1	31.4	30.8	30.7	31.1	31.7	31.9	31.7	30.18
32.7	31.9	31.5	31.9	32.9	31.7	32.8	32.4	32.8	32.6	31.4	31.3	33.71
41.9	41.1	41.1	41.2	41.0	42.0	42.0	39.9	38.2	37.9	37.2	36.2	39.94
43.4	44.1	44.1	45.0	44.5	47.4	46.6	47.0	45.2	44.8	46.2	46.6	41.96
39.7	38.7	38.3	38.1	37.5	36.7	36.5	36.2	35.7	34.3	33.6	33.8	41.42
29.1	27.5	26.9	27.4	26.9	28.4	—	—	—	—	—	—	—
—	—	—	—	—	—	39.6	39.1	39.4	39.4	38.9	38.7	34.87
33.2	33.0	31.9	31.9	31.0	30.9	30.7	30.7	30.7	30.9	31.0	31.3	33.48
32.8	32.7	32.8	32.8	32.6	32.8	32.8	32.9	32.8	32.9	32.4	33.2	32.68
26.7	26.0	24.1	24.2	20.5	19.4	18.4	17.1	15.8	15.5	12.6	12.5	24.07
20.2	20.8	19.8	19.6	19.6	19.1	18.4	17.9	15.8	15.1	14.8	15.8	17.05
25.1	22.5	22.5	21.8	20.2	18.4	18.1	16.9	15.4	14.8	13.2	15.0	19.99
32.8	32.6	33.0	32.6	30.7	32.4	—	—	—	—	—	—	—
—	—	—	—	—	—	19.0	18.8	18.4	18.1	16.9	15.8	24.60
10.7	9.9	9.4	10.7	11.0	11.4	11.4	10.8	10.2	10.3	10.0	9.2	11.83
20.6	22.7	22.9	23.7	23.7	24.0	24.4	24.8	24.2	22.5	21.3	21.0	19.18
20.4	18.4	17.7	17.3	17.9	18.4	17.0	16.6	16.8	16.8	17.1	17.1	20.03
23.3	23.3	23.5	23.7	23.6	23.5	22.7	22.6	22.6	22.8	22.7	24.4	22.23
19.8	19.6	19.1	18.8	18.6	18.5	—	—	—	—	—	—	—
—	—	—	—	—	—	10.7	10.7	11.3	12.3	13.8	13.3	17.94
19.6	19.2	19.0	22.1	23.3	24.8	25.1	25.8	25.8	27.0	28.0	28.6	20.01
34.6	35.0	35.0	35.0	35.0	35.2	35.8	35.8	36.3	36.1	36.3	36.8	31.12
40.2	39.6	39.1	38.5	38.4	38.3	39.4	39.8	40.0	40.6	40.9	40.9	39.63
42.7	43.1	43.1	42.1	42.2	41.5	41.7	41.7	41.7	41.3	40.7	42.2	42.39
43.4	42.7	42.4	42.3	43.5	43.4	44.3	44.9	45.3	46.0	46.0	46.2	44.03
—	—	—	—	—	—	—	—	—	—	—	—	—
30.37	30.11	29.81	29.81	29.83	29.95	29.24	29.07	28.73	28.56	28.44	28.53	29.72

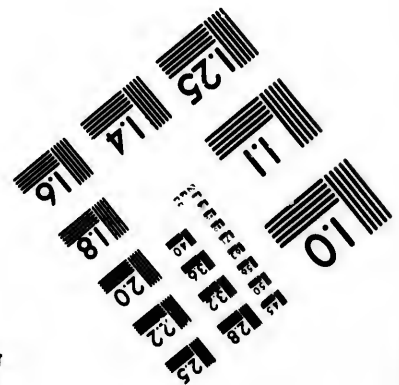
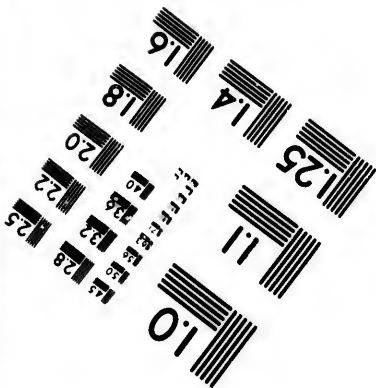
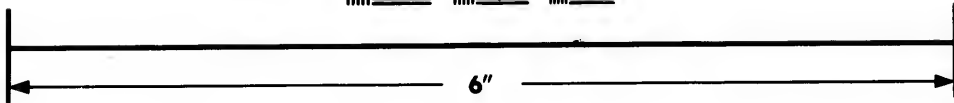
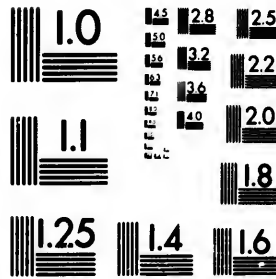
		WET THERMOMETER.										
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
JANUARY.												
1	16°2	47°2	46°6	47°1	46°6	47°9	48°3	48°2	49°2	48°3	50°4	50°5
2	—	—	—	—	—	—	—	—	—	—	—	—
3	32°6	32°5	32°9	34°0	34°5	35°2	35°5	36°0	36°2	36°5	35°4	35°0
4	33°7	34°1	32°1	28°0	28°6	28°1	26°0	25°1	25°5	25°1	24°0	24°6
5	24°2	25°6	26°5	27°4	27°8	29°3	31°7	33°4	33°6	33°6	33°6	29°6
6	12°0	11°2	10°4	10°7	10°7	12°1	12°9	13°9	13°5	13°0	14°0	13°3
7	13°5	14°8	14°6	15°5	15°8	17°0	18°8	19°6	19°8	19°9	19°7	19°7
8	30°4	31°0	30°8	30°7	31°0	31°6	31°8	33°1	33°0	30°7	30°4	29°2
9	—	—	—	—	—	—	—	—	—	—	—	—
10	10°5	11°2	10°9	8°8	6°2	2°5	2°2	1°8	0°8	0°9	0°6	1°9
11	9°6	9°6	11°9	16°6	17°4	19°4	19°6	21°0	21°8	22°3	21°6	21°2
12	11°7	8°9	8°2	11°4	15°1	21°4	24°0	25°9	25°5	26°0	23°7	21°2
13	31°5	32°1	32°8	33°1	33°6	34°2	35°4	35°7	35°8	35°3	36°2	36°4
14	36°7	36°8	37°3	37°5	37°5	37°9	38°3	38°3	38°4	38°4	38°4	38°4
15	40°0	39°8	41°1	41°1	42°8	43°7	44°7	44°5	44°9	47°1	45°1	44°8
16	—	—	—	—	—	—	—	—	—	—	—	—
17	29°5	29°3	24°6	24°0	22°7	21°6	22°0	23°5	22°9	23°7	23°7	23°1
18	27°0	25°3	19°7	22°0	20°6	19°6	20°0	19°2	18°9	18°3	17°0	16°6
19	5°6	5°6	6°5	9°6	13°5	14°3	16°9	17°5	19°3	20°3	20°9	20°1
20	27°5	28°0	28°2	30°7	33°2	33°5	34°2	35°9	36°7	38°2	36°7	35°7
21	35°9	35°8	35°8	37°2	39°6	39°8	38°5	37°3	35°4	33°8	29°7	29°6
22	15°1	15°4	16°5	17°6	19°2	21°7	23°5	24°6	25°6	27°4	26°8	26°4
23	—	—	—	—	—	—	—	—	—	—	—	—
24	21°9	20°9	21°3	26°0	27°6	28°6	29°1	29°2	30°7	30°7	30°8	29°1
25	27°4	27°8	29°1	32°7	33°2	35°7	36°2	36°6	37°7	38°0	36°7	34°8
26	37°5	37°4	37°5	38°0	38°0	37°9	38°3	38°7	39°4	39°7	40°0	40°2
27	38°0	37°5	38°1	39°0	40°1	41°2	42°1	41°4	40°1	40°2	39°2	38°2
28	29°0	29°6	29°6	29°6	31°3	32°6	33°0	33°4	33°4	33°2	33°2	33°0
29	26°1	29°1	28°6	30°7	29°0	28°6	28°7	29°0	29°1	29°3	30°3	29°6
30	—	—	—	—	—	—	—	—	—	—	—	—
31	34°2	33°6	34°4	35°8	36°0	36°5	37°0	37°5	37°7	38°8	35°1	34°1
Hourly Means	25°59	25°68	25°67	26°62	27°82	28°73	29°39	29°87	30°20	30°49	29°76	28°5
FEBRUARY.												
1	24°1	24°6	25°1	25°8	26°4	26°6	26°4	25°6	26°0	26°0	26°0	25°
2	24°1	24°5	24°8	27°1	31°9	33°2	33°0	33°0	33°2	33°4	33°2	33°6
3	29°0	27°6	27°7	32°1	33°0	34°4	37°1	37°5	37°7	37°5	36°5	33°6
4	32°3	32°8	33°2	35°4	37°5	37°8	37°6	37°8	37°0	37°3	37°4	37°6
5	27°2	26°8	26°1	26°0	26°1	26°9	26°9	25°8	26°5	26°4	25°7	25°2
6	—	—	—	—	—	—	—	—	—	—	—	—
7	21°6	20°8	20°1	20°3	21°1	21°8	22°5	23°4	24°6	25°6	25°8	24°0
8	18°9	19°4	19°8	21°2	22°5	22°9	24°6	25°8	26°4	26°2	25°7	25°2
9	22°3	22°3	24°8	27°2	26°9	28°4	30°5	30°9	30°9	30°9	30°5	29°8
10	20°1	18°1	16°1	13°1	13°5	14°0	14°6	15°5	15°4	16°0	15°3	14°8
11	4°0	0°4	0°9	3°2	5°0	7°5	10°3	10°3	11°0	12°1	12°6	12°9
12	12°8	13°3	14°3	15°3	18°0	19°5	19°7	21°8	22°9	23°1	22°9	21°8
13	—	—	—	—	—	—	—	—	—	—	—	—
14	19°6	18°7	20°4	25°8	28°4	31°1	32°8	33°8	34°1	34°6	34°6	33°8
15	19°4	18°0	18°1	19°6	22°7	25°2	25°8	30°5	28°7	28°0	29°4	28°4
16	20°2	23°3	24°8	30°4	31°3	32°6	33°1	33°1	32°8	33°1	32°9	31°6
17	21°6	21°0	24°8	28°5	32°4	33°1	34°0	34°1	34°5	34°0	33°5	31°5
18	20°4	20°5	24°8	28°1	31°9	32°9	33°0	33°0	34°6	34°2	35°1	34°2
19	30°8	31°6	32°7	33°1	34°2	35°6	36°9	37°1	36°7	36°0	34°9	34°5
20	—	—	—	—	—	—	—	—	—	—	—	—
21	34°4	34°2	34°2	35°4	35°9	36°5	38°1	38°7	39°8	39°2	39°0	38°1
22	31°1	31°3	32°5	33°8	35°3	36°7	37°7	38°3	37°1	36°8	36°3	35°7
23	30°5	29°6	32°3	33°7	32°6	31°5	29°6	34°2	31°1	31°1	30°5	29°1
24	20°0	21°0	22°0	21°8	23°0	24°0	24°1	25°4	26°8	27°0	28°0	26°2
25	16°7	16°2	14°5	14°9	16°9	18°1	19°4	20°2	22°7	21°0	20°9	20°2
26	13°0	12°9	19°0	25°2	27°9	27°6	27°9	28°6	30°5	30°8	30°5	30°3
27	—	—	—	—	—	—	—	—	—	—	—	—
28	26°4	26°8	27°6	28°7	29°8	31°1	32°1	32°8	33°5	35°4	35°6	34°6
Hourly Means	22°02	21°91	23°15	25°30	26°85	27°87	28°65	29°48	29°78	29°82	29°70	28°79







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WET THERMOMETER.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MARCH.	1	10°2	7°8	9°7	10°7	12°3	14°6	17°0	18°6	18°8	18°8	18°1	17°1
	2	8°5	9°4	11°9	13°8	16°0	15°6	17°9	19°8	20°8	20°2	19°8	17°9
	3	19°0	19°1	18°2	19°0	19°6	21°7	23°1	23°7	25°4	25°3	24°4	22°2
	4	17°9	17°5	18°8	20°0	22°5	22°3	23°0	22°3	22°8	21°7	20°4	18°9
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	20°0	20°2	21°0	22°0	23°8	25°1	25°4	26°8	29°4	28°2	28°7	29°9
	7	17°6	19°8	23°8	29°4	32°8	33°6	35°7	36°2	37°5	37°7	36°5	37°2
	8	34°6	35°0	36°6	37°1	39°3	40°3	39°9	41°0	40°4	44°0	39°1	35°8
	9	23°2	22°7	23°7	24°6	25°3	24°2	25°4	25°2	26°0	26°7	26°4	25°6
	10	15°8	15°8	15°7	17°7	19°4	21°8	23°5	25°2	29°2	26°9	26°8	26°0
	11	16°6	17°7	20°3	24°0	26°1	27°2	30°8	31°5	30°5	30°9	30°6	30°9
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	23°1	23°4	22°2	22°5	21°8	21°6	22°4	24°2	23°8	22°6	21°4	21°4
	14	11°2	10°4	11°5	12°4	14°0	14°0	14°8	14°6	14°0	12°3	11°6	10°4
	15	3°0	4°1	5°9	7°6	10°4	10°7	14°0	15°6	15°0	15°6	15°2	14°2
	16	11°7	13°1	16°0	19°6	20°9	22°1	23°2	24°5	25°4	26°0	25°9	25°3
	17	22°7	23°5	23°2	23°4	23°4	23°4	23°5	23°5	23°0	23°4	24°0	24°0
	18	18°4	21°6	23°4	26°6	28°1	29°2	29°6	31°7	31°7	32°1	31°9	31°3
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	25°2	26°8	31°0	32°6	33°2	33°4	33°4	34°0	34°9	35°7	36°2	36°5
	21	38°7	38°5	38°2	40°2	42°2	42°9	43°3	44°7	44°2	44°0	42°5	41°6
	22	29°4	31°1	32°5	33°6	33°8	34°0	34°8	34°8	34°6	34°8	34°9	33°8
	23	31°9	31°9	31°9	32°6	34°4	34°7	37°3	38°1	36°7	37°3	36°7	36°7
	24	26°7	29°8	32°6	33°9	34°9	36°2	37°1	37°8	35°6	36°3	36°9	36°2
	25	34°7	35°5	37°7	38°1	36°7	37°2	37°5	37°5	39°0	40°9	40°8	41°0
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	32°6	32°6	32°8	29°9	30°7	31°9	35°6	36°2	36°7	36°3	35°0	34°2
	28	26°9	28°6	32°1	33°0	36°0	38°3	39°8	39°0	40°8	40°9	40°3	40°8
	29	31°7	35°5	39°8	41°9	43°6	44°0	46°1	47°4	51°5	48°3	49°2	50°1
	30	31°1	34°6	36°0	37°0	37°7	37°9	38°6	38°2	39°2	40°2	41°0	41°0
	31	35°8	37°7	40°8	45°4	47°9	50°6	52°5	53°1	55°3	59°4	58°2	56°7
Hourly Means	22°90	23°84	25°46	26°99	28°40	29°20	30°56	31°30	31°93	32°09	31°57	30°99	
APRIL.	1	31°3	33°2	32°1	32°1	32°7	34°8	34°2	33°9	34°0	34°0	32°6	32°5
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	31°7	36°7	38°7	39°6	41°0	41°6	41°2	41°8	41°9	42°3	43°7	43°5
	4	41°1	42°0	42°0	43°5	43°9	43°9	44°7	44°8	47°3	46°1	44°6	43°9
	5	32°5	32°1	32°3	33°0	33°8	35°2	40°1	38°8	38°7	38°2	36°9	37°7
	6	27°4	31°4	33°9	38°3	38°9	40°2	41°8	41°8	41°8	42°3	42°8	42°0
	7	32°5	34°8	36°7	38°9	41°4	41°4	40°4	38°9	39°4	40°0	39°2	39°2
	8	27°6	32°1	37°4	40°2	40°8	42°0	42°9	43°1	45°6	45°8	45°2	45°2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	36°7	42°1	46°6	52°4	50°9	55°1	54°3	55°0	53°6	53°0	53°7	51°7
	11	42°3	42°0	43°5	42°0	42°4	42°6	43°4	42°8	44°3	43°5	42°0	42°3
	12	31°4	37°0	39°1	43°3	41°5	45°4	45°6	46°8	47°2	46°2	46°0	44°9
	13	34°2	35°0	35°6	35°2	37°0	37°0	38°3	39°1	38°3	38°1	37°7	37°3
	14	36°5	37°9	38°1	40°1	39°8	39°8	41°3	44°4	42°7	42°8	42°5	40°6
	15	37°2	39°6	42°3	44°0	45°4	45°9	46°6	46°6	46°4	45°6	45°6	43°9
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	30°5	31°8	32°7	33°4	35°1	35°9	36°9	40°4	39°8	38°3	39°2	39°4
	18	28°7	28°6	30°5	30°7	31°3	32°8	29°8	28°2	28°4	29°0	29°9	29°7
	19	25°8	30°5	30°7	29°2	32°4	32°8	35°1	34°6	34°6	34°4	34°3	35°5
	20	26°4	29°2	33°2	36°3	37°9	39°2	42°5	42°0	44°8	45°6	43°9	43°4
	21*	—	—	—	—	—	—	—	—	—	—	—	—
	22	35°6	38°9	40°1	40°6	40°4	40°7	43°0	44°1	44°3	42°7	43°3	45°7
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	31°5	32°1	33°0	36°9	38°7	39°4	37°9	36°7	36°2	36°3	35°8	34°4
	25	27°4	31°3	33°4	37°7	37°7	38°5	39°6	40°8	40°8	40°2	40°4	39°1
	26	31°7	33°4	34°6	35°7	39°2	39°9	40°0	39°7	41°3	40°2	41°3	40°6
	27	29°2	35°0	39°7	41°4	42°5	44°4	44°2	44°0	44°9	44°9	43°8	42°5
	28	36°3	37°5	38°0	39°1	39°8	40°6	39°8	39°4	40°4	42°3	42°7	42°5
	29	42°5	42°1	40°6	39°4	40°0	40°7	42°0	42°5	41°4	41°6	40°6	39°9
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	32°97	35°26	36°27	38°46	39°48	40°41	41°07	41°26	41°59	41°39	41°15	40°73	

\* Good Friday.



9	10	11
3	4	5
18.8	18.1	17.1
20.2	19.8	17.9
25.3	24.4	22.2
21.7	20.4	18.9
—	—	—
28.2	28.7	29.9
37.7	36.5	37.2
44.0	39.1	35.8
26.7	26.4	25.6
26.9	26.8	26.0
30.9	30.6	30.9
—	—	—
22.6	21.4	21.4
12.3	11.6	10.4
15.6	15.2	14.2
26.0	25.9	25.3
23.4	24.0	24.0
32.1	31.9	31.3
—	—	—
35.7	36.2	36.5
44.0	42.5	41.6
34.8	34.9	33.8
37.3	36.7	36.7
36.3	36.9	36.2
40.9	40.8	41.0
—	—	—
36.3	35.0	31.2
40.9	40.3	40.8
48.3	49.2	50.1
40.2	41.0	41.0
59.4	58.2	56.7
—	—	—
32.09	31.57	30.99
—	—	—
34.0	32.6	32.5
42.3	43.7	43.5
46.1	44.6	43.9
38.2	36.9	37.7
42.3	42.8	42.0
40.0	39.2	39.2
45.8	45.2	45.2
—	—	—
53.0	53.7	51.7
43.5	42.0	42.3
46.2	46.0	41.9
38.1	37.7	37.3
42.8	42.5	40.6
45.6	45.6	43.9
—	—	—
38.3	39.2	39.4
29.0	29.9	29.7
34.4	34.3	35.5
45.6	43.9	43.4
—	—	—
42.7	43.3	45.7
—	—	—
36.3	35.8	34.4
40.2	40.4	39.1
40.2	41.3	40.6
44.9	43.8	42.5
42.3	42.7	42.5
41.6	40.6	39.9
—	—	—
41.39	41.15	40.73

WET THERMOMETER.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	17	
6	7	8	9	10	11	12	13	14	15	16	17		
15.1	14.0	12.6	8.2	12.3	11.7	7.1	1.7	5.1	8.6	9.0	9.5	12.03	
16.1	15.6	15.6	16.3	16.1	16.7	18.1	18.6	19.2	19.6	19.7	19.6	16.78	
20.8	19.8	17.9	17.5	16.9	16.6	17.5	17.5	19.6	20.0	20.2	18.1	20.13	
17.9	17.2	17.7	17.7	17.9	16.9	—	—	—	—	—	—	—	
—	—	—	—	—	—	19.7	20.6	21.6	19.6	19.9	21.6	19.85	
29.4	26.2	22.9	20.5	20.6	20.4	17.9	18.1	18.1	18.2	17.9	16.9	22.82	
36.5	36.0	35.8	36.2	36.5	36.3	36.0	36.1	36.3	35.8	35.7	34.8	33.74	
35.2	34.8	34.4	34.2	34.4	34.0	33.4	31.6	28.2	27.4	26.4	26.0	35.13	
25.2	25.5	24.8	25.1	24.2	23.3	23.0	22.8	19.4	19.4	17.7	17.3	23.61	
24.8	23.5	21.6	20.4	20.1	20.2	20.0	18.8	18.1	16.9	16.2	17.3	20.90	
30.5	28.6	28.3	28.5	29.0	28.4	—	—	—	—	—	—	—	
—	—	—	—	—	—	30.9	28.4	26.8	25.3	24.2	23.3	27.05	
18.1	18.7	16.9	16.4	15.7	15.1	14.6	13.9	13.1	12.7	12.5	12.2	18.76	
7.6	6.5	6.3	5.9	5.7	5.5	5.5	5.1	4.4	4.2	4.3	3.4	8.98	
13.1	11.3	11.1	10.7	10.0	9.4	9.0	8.4	8.4	8.0	10.0	10.9	10.53	
23.8	23.6	23.7	23.5	24.0	23.7	23.5	24.0	23.4	23.3	23.1	23.1	22.35	
23.5	22.5	20.8	20.6	19.4	18.1	18.4	16.7	16.2	17.4	17.9	18.4	21.29	
31.3	29.1	29.0	29.4	29.4	29.2	—	—	—	—	—	—	—	
—	—	—	—	—	—	27.5	24.8	25.4	25.1	24.6	24.3	27.70	
37.0	37.0	36.5	36.2	35.6	35.2	35.4	35.8	36.9	42.3	42.3	42.1	35.22	
37.7	34.8	34.2	33.5	32.4	31.7	30.7	30.5	29.8	29.6	28.6	28.6	36.80	
33.4	32.6	32.4	31.5	31.3	31.7	31.5	31.6	31.7	31.7	31.9	31.8	32.72	
34.2	32.8	31.1	29.6	28.6	27.8	27.6	27.2	26.8	26.8	26.4	26.4	31.90	
40.6	40.4	40.6	40.4	40.0	39.8	34.8	34.9	34.4	34.5	34.8	34.8	34.32	
—	—	—	—	—	—	—	—	—	—	—	—	—	
33.8	33.0	32.7	31.8	29.9	29.5	33.8	32.8	32.1	31.3	30.7	30.5	37.07	
39.6	38.7	38.8	38.8	38.8	37.9	37.4	35.8	27.1	27.2	27.1	26.6	31.75	
48.3	42.5	40.2	37.9	36.5	35.0	33.1	31.5	30.7	30.7	29.6	29.4	39.77	
39.8	38.3	38.1	38.1	38.3	37.9	37.5	37.3	36.9	36.5	35.9	35.1	37.59	
53.9	51.1	49.1	48.6	46.0	39.4	36.0	35.6	34.3	33.8	32.9	32.8	45.29	
—	—	—	—	—	—	—	—	—	—	—	—	—	
29.68	28.40	27.63	27.09	26.79	26.13	25.51	24.79	24.49	24.52	24.25	23.98	27.44	
—	—	—	—	—	—	—	—	—	—	—	—	—	
32.5	31.5	31.5	31.5	31.6	31.3	—	—	—	—	—	—	—	
—	—	—	—	—	—	33.8	32.7	32.6	32.8	32.6	31.3	32.63	
42.7	42.3	42.5	42.1	41.4	42.1	42.5	42.0	41.7	41.4	41.9	41.4	41.15	
42.3	41.6	40.2	37.9	36.2	35.6	35.2	33.8	33.3	32.8	31.9	30.9	39.99	
36.7	36.5	34.2	32.6	31.9	30.5	28.9	27.8	27.0	27.2	26.7	26.5	33.16	
40.2	38.5	37.3	36.2	34.9	34.6	33.6	32.8	32.8	32.8	32.7	32.7	36.74	
39.8	36.2	34.6	33.0	33.9	33.3	31.6	31.3	31.5	28.2	27.9	26.6	35.45	
46.2	42.5	39.9	38.1	37.7	37.7	—	—	—	—	—	—	—	
—	—	—	—	—	—	38.4	37.7	36.7	35.6	35.4	35.2	39.54	
51.1	50.1	49.3	45.2	45.0	43.5	41.1	45.0	45.0	45.2	44.0	42.3	48.12	
42.5	43.3	43.3	45.0	47.0	46.4	41.8	38.3	36.0	33.4	34.6	30.7	41.48	
44.1	43.1	42.7	43.1	43.9	43.3	42.7	42.5	42.1	40.2	37.5	36.7	42.47	
37.0	36.7	35.6	35.8	35.7	35.4	35.9	35.8	35.0	36.1	36.1	36.2	36.42	
40.4	38.7	36.8	36.2	38.3	37.9	35.0	33.8	36.5	36.7	36.4	37.2	38.77	
42.5	40.6	39.1	38.7	38.7	38.1	—	—	—	—	—	—	—	
—	—	—	—	—	—	36.5	35.6	33.8	32.8	31.7	29.8	40.30	
37.7	36.3	35.4	35.3	35.1	35.0	34.0	35.2	34.1	32.6	31.3	29.4	35.20	
28.2	27.9	28.4	29.5	29.2	27.2	25.4	23.8	24.6	23.5	23.5	23.2	28.00	
35.0	33.0	30.6	31.6	28.4	26.9	26.3	25.8	25.1	25.1	25.2	24.6	30.31	
41.9	39.5	37.9	37.5	36.5	36.6	—	—	—	—	—	—	—	
—	—	—	—	—	—	43.7	43.2	42.3	41.4	41.2	39.1	39.38	
45.6	41.6	38.3	36.5	35.2	32.8	—	—	—	—	—	—	—	
—	—	—	—	—	—	30.3	31.2	32.8	33.3	33.1	32.3	38.56	
37.5	36.7	34.9	32.9	30.8	29.2	28.2	28.2	28.2	25.8	25.6	25.3	33.01	
38.7	38.0	37.7	37.7	37.3	37.1	36.7	36.0	34.8	31.9	30.5	28.5	36.28	
37.6	35.2	36.5	35.4	35.0	32.1	30.3	27.8	27.4	26.8	26.4	26.7	34.78	
41.6	39.9	39.2	37.9	36.2	35.2	35.6	35.3	35.0	35.2	35.6	36.0	39.13	
42.9	41.8	41.2	41.4	42.3	42.3	42.6	42.5	42.5	42.3	42.1	42.0	41.01	
39.6	37.8	36.5	34.8	34.6	31.6	—	—	—	—	—	—	—	
—	—	—	—	—	—	34.4	33.8	33.4	32.8	36.2	36.7	38.15	
—	—	—	—	—	—	—	—	—	—	—	—	—	
40.18	38.72	37.65	36.91	36.53	35.65	35.31	34.66	34.30	33.58	33.34	32.55	37.50	

		WET THERMOMETER.											
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
MAY.	1	38°3	40°2	41°4	44°3	41°9	45°6	45°9	44°4	43°5	45°2	46°5	46°3
	2	41°2	42°1	44°1	47°8	49°9	49°0	49°7	50°2	50°4	49°4	48°9	49°6
	3	44°0	49°5	50°9	52°0	53°6	54°1	53°9	52°4	52°1	54°8	53°7	52°3
	4	44°1	45°3	48°1	50°9	50°7	51°1	49°8	48°8	48°6	48°8	47°6	48°4
	5	52°5	57°5	58°2	61°8	61°0	63°8	63°6	64°0	61°4	62°8	62°9	59°4
	6	51°7	57°5	59°9	61°0	61°4	64°2	64°4	64°9	66°8	64°7	62°4	62°9
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	39°3	41°4	43°9	47°2	46°6	47°5	48°7	48°6	48°2	48°1	49°3	48°8
	9	42°5	46°7	50°1	51°2	51°0	51°8	52°9	54°4	53°1	51°2	52°6	50°2
	10	45°2	46°4	46°9	47°4	48°0	48°2	48°8	50°2	51°2	50°2	50°2	49°8
	11	45°2	45°2	45°4	46°1	46°6	46°6	46°6	45°6	46°2	46°0	47°0	46°6
	12	37°7	39°4	40°4	42°3	43°3	44°3	44°0	44°2	44°9	46°4	46°9	47°4
	13	33°6	36°3	38°3	38°5	39°8	42°1	43°6	46°2	44°2	43°0	41°0	39°0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	37°0	41°8	45°1	46°4	47°8	50°0	49°2	49°3	47°6	45°6	45°6	46°5
	16	49°0	50°9	51°6	52°1	54°4	55°7	56°2	55°6	54°7	54°0	55°7	55°2
	17	42°0	49°7	51°2	52°6	53°6	55°5	55°8	56°7	58°0	57°8	57°4	55°6
	18	49°9	55°7	56°7	58°4	59°7	59°0	60°6	60°8	62°7	62°0	62°0	62°5
	19	54°6	55°8	59°9	61°9	63°6	66°1	65°7	65°3	66°5	63°9	63°1	65°3
	20	58°6	58°6	62°6	67°1	66°6	66°9	70°6	67°4	68°4	66°3	64°7	66°0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	55°1	50°8	50°9	55°7	56°5	56°5	55°7	56°1	56°2	56°3	55°0	56°9
	23	53°9	52°3	51°9	49°6	49°3	49°3	49°9	50°7	52°1	54°7	54°7	55°1
	24	53°7	54°1	56°5	59°2	63°5	64°7	62°7	65°3	64°0	63°7	65°3	62°4
	25	54°2	55°9	57°5	59°3	63°0	64°3	64°8	64°5	65°7	65°1	62°3	63°7
	26	48°3	48°9	49°6	50°2	51°3	54°3	58°1	59°9	58°1	55°3	53°9	54°5
	27	48°0	49°6	53°7	56°3	56°7	57°4	57°2	58°5	58°9	57°1	58°1	56°7
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	57°9	60°9	60°5	62°0	65°0	61°7	67°5	68°1	67°1	68°8	69°1	70°3
	30	52°9	55°0	55°0	55°1	54°2	56°1	56°5	54°6	51°6	49°8	48°5	46°9
	31	38°8	40°2	40°2	42°1	43°1	44°6	43°3	45°3	43°8	44°5	45°7	46°4
Hourly Means	47°01	49°17	50°76	52°51	53°63	54°61	55°03	55°26	55°04	54°65	54°45	54°25	
JUNE.	1	42°9	44°2	45°3	45°7	45°5	46°3	47°8	47°0	50°9	52°5	53°9	55°7
	2	46°2	51°4	54°3	56°5	58°3	59°7	60°1	60°8	61°0	60°3	58°8	60°3
	3	64°1	63°9	63°9	65°2	65°5	65°5	66°2	65°9	66°3	66°3	66°1	65°3
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	54°0	55°8	59°7	60°1	60°3	61°7	61°9	57°7	56°9	61°3	62°4	58°0
	6	46°4	48°2	48°4	49°4	48°4	49°1	50°0	50°4	49°4	49°9	49°1	47°4
	7	43°2	41°6	45°7	47°1	48°7	50°1	52°0	52°2	53°1	53°5	52°3	52°2
	8	48°0	51°2	54°2	55°9	59°3	60°1	59°3	59°3	59°6	60°7	62°5	59°5
	9	52°9	56°8	61°9	61°9	62°1	63°0	63°5	63°5	61°9	64°6	65°7	64°9
	10	58°0	59°4	58°8	61°3	64°4	63°3	63°3	64°4	64°6	64°4	62°0	61°4
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	43°6	43°2	42°8	43°1	43°9	43°4	44°8	45°4	45°7	46°9	46°4	45°6
	13	41°1	40°6	43°2	42°9	45°1	46°0	46°8	47°2	46°4	47°3	47°2	46°6
	14	42°4	42°4	46°4	50°3	50°9	54°8	53°4	53°5	56°2	57°3	59°0	58°1
	15	59°3	63°7	68°6	70°1	72°4	70°7	72°1	71°7	71°1	70°9	68°9	68°5
	16	68°4	69°3	71°1	72°4	73°4	75°6	72°4	74°1	74°0	74°1	72°3	72°5
	17	64°9	69°0	70°9	71°5	73°3	74°3	74°7	72°3	71°3	73°3	71°3	72°7
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	63°8	65°0	66°5	69°5	69°9	71°5	71°7	71°7	69°3	69°3	70°5	69°0
	20	61°7	64°3	66°5	67°5	69°2	67°9	69°5	67°7	67°6	66°5	67°5	58°6
	21	57°2	60°8	59°9	61°9	61°5	60°5	61°5	61°9	61°0	61°4	62°3	62°0
	22	55°7	57°3	63°1	64°9	63°6	63°8	64°6	65°8	64°5	64°3	63°9	61°1
	23	60°9	62°1	63°6	64°3	66°7	69°0	68°5	70°3	66°3	64°1	60°9	60°7
	24	56°1	57°3	57°9	56°5	56°3	57°0	56°4	55°9	55°9	56°9	54°5	54°1
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	60°3	61°9	67°9	68°8	70°1	70°4	71°4	71°4	71°1	70°6	70°9	70°1
	27	58°2	63°0	66°1	68°5	69°1	68°9	70°1	70°9	70°9	70°1	70°9	66°2
	28	68°9	68°1	69°7	70°2	69°7	68°7	65°0	65°3	64°6	66°1	64°5	62°1
	29	56°5	59°8	63°5	66°3	66°3	65°6	66°3	67°3	67°9	68°1	67°9	67°1
	30	56°9	58°9	64°2	64°8	66°0	67°3	65°9	66°3	67°0	68°1	67°5	68°5
Hourly Means	55°06	57°12	59°39	60°64	61°53	62°08	62°28	62°30	62°17	62°65	62°28	61°20	

WET THERMOMETER.

9	10	11
3	4	5
45°2	46°5	46°3
49°4	48°9	49°6
54°8	53°7	52°3
48°8	47°6	48°4
62°8	62°9	59°4
64°7	62°4	62°9
—	—	—
48°1	49°3	48°8
51°2	52°6	50°2
50°2	50°2	49°8
46°0	47°0	46°6
46°4	46°9	47°4
43°0	41°0	39°0
—	—	—
45°6	45°6	46°5
54°0	55°7	55°2
57°8	57°4	55°6
62°0	62°0	62°5
63°9	63°1	65°3
66°3	64°7	66°0
—	—	—
56°3	55°0	56°9
54°7	54°7	55°1
63°7	65°3	62°4
65°1	62°3	63°7
55°3	54°9	54°5
57°1	58°1	56°7
—	—	—
68°8	69°1	70°3
49°8	48°5	46°9
44°5	45°7	46°4
54°65	54°45	54°25
—	—	—
52°5	53°9	55°7
60°3	58°8	60°3
66°3	66°1	65°3
—	—	—
61°3	62°4	58°0
49°9	49°1	47°4
53°5	52°3	52°2
60°7	62°5	59°5
64°6	65°7	64°9
64°4	62°0	61°4
—	—	—
46°9	46°4	45°6
47°3	47°2	46°6
57°3	59°0	58°1
70°9	68°9	68°5
74°1	72°3	72°5
73°3	71°3	72°7
—	—	—
69°3	70°5	69°0
66°5	67°5	58°6
61°4	62°3	62°0
64°3	63°9	61°1
64°1	60°9	60°7
56°9	54°5	54°1
—	—	—
70°6	70°9	70°1
70°1	70°9	66°2
66°1	64°5	62°1
68°1	67°9	67°1
68°1	67°5	68°5
62°65	62°28	61°20

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
45°2	42°6	41°3	39°7	39°4	38°8	38°6	37°5	36°7	36°9	36°6	36°8	41°53
48°4	46°0	43°4	41°4	40°2	38°7	43°6	44°1	42°4	39°8	37°8	39°6	44°90
51°0	48°4	46°7	45°0	43°2	42°2	43°4	41°8	41°7	41°7	39°8	38°8	47°79
49°6	50°2	51°1	50°9	51°2	51°0	50°1	49°4	49°4	49°4	49°0	47°2	49°20
57°6	54°9	58°8	59°0	54°2	54°4	53°6	53°4	50°7	49°5	48°0	47°2	57°18
58°4	60°1	60°1	58°4	57°4	55°8	—	—	—	—	—	—	—
—	—	—	—	—	—	45°0	37°8	36°6	35°4	36°2	36°8	54°99
47°0	45°8	44°2	44°2	44°6	44°9	44°4	42°8	41°0	39°0	38°6	38°6	44°70
50°0	49°6	49°4	48°6	48°4	47°4	44°8	42°8	45°4	45°8	45°7	43°4	48°71
48°6	48°2	47°6	46°7	46°2	46°6	46°6	46°6	46°4	46°2	46°0	46°0	47°68
45°5	44°2	42°7	42°3	41°4	40°8	40°2	40°1	38°9	38°4	37°2	36°9	43°40
45°9	43°2	39°6	37°3	36°8	34°2	33°4	30°6	30°6	31°6	30°0	31°4	39°41
37°4	38°6	39°4	39°6	40°0	39°8	—	—	—	—	—	—	—
—	—	—	—	—	—	38°4	35°4	33°0	31°2	31°2	32°0	38°40
45°9	46°6	44°6	45°2	45°6	45°8	46°2	46°9	47°0	47°0	46°7	47°1	46°19
53°6	52°0	49°6	48°6	46°1	44°1	42°8	40°4	38°2	38°4	36°7	37°4	48°89
52°5	51°2	50°5	49°4	47°9	47°1	47°8	47°0	46°4	44°6	44°0	43°9	50°77
62°2	58°9	55°4	53°4	52°6	51°1	50°2	49°4	49°0	49°0	49°3	50°2	55°86
65°1	60°9	55°9	56°8	58°3	58°2	57°5	57°2	57°1	56°7	55°7	56°3	60°31
65°6	65°6	62°4	56°7	57°7	59°6	—	—	—	—	—	—	—
—	—	—	—	—	—	59°3	59°1	58°9	58°6	57°8	56°9	62°58
55°1	53°4	52°1	49°9	50°5	52°9	51°7	52°9	52°7	52°4	52°1	52°1	53°73
54°2	51°8	51°3	52°3	51°7	51°2	52°2	52°4	51°4	53°9	55°9	54°9	52°49
39°7	58°8	56°7	51°5	54°7	54°1	53°3	51°9	51°5	50°3	50°1	52°3	57°63
59°9	57°6	54°9	50°7	50°1	48°6	48°6	48°0	48°0	47°0	44°6	45°1	55°98
53°9	52°2	49°4	45°5	46°4	45°5	45°2	45°0	44°2	44°1	43°7	43°8	50°05
39°1	56°9	51°5	50°5	50°2	50°1	—	—	—	—	—	—	—
—	—	—	—	—	—	54°9	53°9	53°9	53°9	53°3	52°7	54°55
70°6	67°0	64°0	59°6	57°8	54°7	52°3	51°9	51°3	49°7	48°2	47°4	60°56
45°6	44°5	43°6	43°3	44°0	43°8	41°4	39°8	40°0	39°2	38°6	38°8	47°45
46°0	45°8	46°0	45°0	42°4	42°2	42°1	40°4	38°8	38°4	37°6	38°3	42°54
53°10	51°67	50°04	48°69	48°11	47°55	46°95	45°80	45°34	44°74	44°09	44°14	50°27
—	—	—	—	—	—	—	—	—	—	—	—	—
52°5	51°5	46°8	43°6	44°4	44°8	43°4	43°5	42°3	42°6	40°7	41°0	46°45
39°9	59°5	58°5	55°9	58°0	59°8	59°4	59°1	57°2	58°3	59°9	62°3	58°15
64°2	60°9	60°9	59°8	58°7	56°9	—	—	—	—	—	—	—
—	—	—	—	—	—	57°9	57°9	57°7	57°3	52°9	49°6	61°62
54°3	54°4	51°2	50°9	50°1	48°8	47°6	45°8	45°3	44°3	44°5	45°6	53°86
47°0	45°8	45°4	45°2	42°0	43°6	42°5	41°2	40°5	39°7	40°0	40°1	45°80
52°1	48°7	48°0	46°0	45°5	45°4	45°5	45°2	44°8	44°4	44°3	44°7	47°89
55°7	55°7	55°1	54°9	54°6	53°5	53°4	50°7	49°9	49°0	47°7	48°0	54°91
63°2	60°2	57°9	57°5	56°6	55°7	55°5	54°9	53°9	54°9	54°3	54°7	59°33
61°9	60°6	58°3	57°9	53°9	50°9	—	—	—	—	—	—	—
—	—	—	—	—	—	46°0	44°6	43°6	42°4	41°6	41°2	56°43
45°0	43°6	42°4	41°2	39°6	40°6	39°0	36°7	38°6	38°6	38°8	39°7	42°44
46°1	45°2	44°6	44°2	44°0	42°6	42°5	41°5	40°3	38°6	38°4	38°0	43°60
59°0	60°3	55°6	53°1	51°9	51°5	50°6	50°2	49°0	47°4	50°0	51°2	51°85
69°5	68°1	69°2	65°7	64°9	65°7	65°9	68°3	67°7	66°5	65°5	65°8	67°95
75°9	71°4	69°9	66°6	66°5	65°9	64°9	64°4	62°4	60°5	58°9	59°1	68°96
69°9	66°8	64°9	64°3	61°1	61°0	—	—	—	—	—	—	—
—	—	—	—	—	—	62°7	62°5	62°9	63°7	61°1	60°8	67°80
67°1	66°2	64°5	63°8	63°3	62°7	62°7	61°3	59°7	58°9	59°0	59°9	52°83
62°1	61°1	61°1	60°5	59°6	57°9	56°1	55°5	52°9	51°9	53°3	53°7	61°68
39°8	59°1	56°5	55°9	54°5	53°4	51°7	51°7	51°9	51°7	51°9	53°0	57°63
59°3	60°3	58°7	58°0	57°8	57°1	57°7	57°9	58°7	58°9	60°7	60°7	60°77
60°5	58°5	57°0	56°3	55°5	54°3	55°1	55°4	55°1	54°8	54°1	53°9	60°33
53°3	53°1	50°1	48°7	46°6	46°5	—	—	—	—	—	—	—
—	—	—	—	—	—	58°1	57°3	55°7	55°9	55°9	56°7	54°70
64°9	62°5	60°7	59°3	60°1	61°2	60°2	59°9	58°9	55°9	55°9	58°0	64°39
66°7	69°1	68°7	66°8	66°1	63°9	63°9	66°5	66°1	65°9	66°5	68°6	67°15
62°9	62°9	61°7	59°7	58°7	57°3	55°9	54°4	54°2	54°1	53°3	53°0	62°13
66°4	64°2	63°9	57°6	56°1	54°9	54°1	53°0	51°2	49°8	51°7	53°1	60°78
67°7	66°1	65°7	64°5	66°3	65°5	63°8	62°7	61°7	59°3	55°9	51°0	63°82
60°38	59°07	57°59	56°07	55°36	54°78	54°47	53°89	53°16	52°51	52°18	52°44	57°96

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JANUARY.	1	76	81	82	86	93	89	79	74	87	98	95
	2	100	100	100	91	96	91	92	95	96	95	94
	3	89	86	90	83	87	82	73	70	66	73	83
	4	—	—	—	—	—	—	—	—	—	—	—
	5	94	92	94	96	90	84	80	79	75	84	88
	6	94	95	97	93	92	87	92	86	86	79	90
	7	95	99	98	96	99	95	95	95	99	100	100
	8	95	86	81	83	83	80	71	78	81	79	84
	9	92	94	90	91	77	84	79	79	84	90	86
	10	85	86	84	95	86	82	84	83	93	82	81
	11	—	—	—	—	—	—	—	—	—	—	—
	12	87	83	86	82	96	66	75	68	72	76	73
	13	93	90	83	90	88	75	68	64	69	71	72
	14	78	84	90	93	86	87	79	78	73	75	76
	15	93	95	93	89	80	71	76	76	70	71	80
	16	86	84	83	84	80	76	80	78	78	76	75
	17	76	78	70	73	75	69	71	60	65	63	68
	18	—	—	—	—	—	—	—	—	—	—	—
	19	72	58	56	81	61	79	66	66	73	75	78
	20	85	88	83	91	91	87	91	87	87	92	93
	21	89	91	90	93	92	88	88	94	94	94	90
	22	87	52	68	100	80	88	96	85	64	69	68
	23	85	87	90	85	82	84	83	70	82	76	83
	24	81	81	82	77	74	67	83	85	87	74	77
	25	—	—	—	—	—	—	—	—	—	—	—
	26	98	98	97	99	94	95	99	96	97	97	97
	27	85	87	90	84	80	80	83	81	78	78	86
	28	87	90	90	89	86	83	76	79	73	75	88
	29	91	87	86	90	80	80	80	79	86	92	90
	30	100	98	99	99	91	97	98	97	94	95	98
	31	73	72	74	78	79	85	66	66	76	77	57
	Feb. 1	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	88	86	86	89	85	83	82	80	81	82	83	
Tension of the Vapour. JANUARY.	1	in. .121	in. .131	in. .135	in. .150	in. .163	in. .166	in. .144	in. .139	in. .158	in. .179	
	2	.213	.221	.223	.203	.228	.206	.199	.205	.202	.200	
	3	.149	.146	.153	.145	.156	.162	.150	.145	.141	.154	
	4	—	—	—	—	—	—	—	—	—	—	
	5	.146	.143	.144	.161	.165	.156	.158	.165	.156	.172	
	6	.138	.160	.166	.168	.172	.166	.181	.171	.171	.159	
	7	.192	.199	.197	.201	.209	.205	.206	.207	.210	.214	
	8	.181	.168	.161	.164	.162	.160	.151	.153	.161	.154	
	9	.144	.145	.136	.139	.119	.128	.119	.126	.126	.145	
	10	.139	.145	.144	.156	.148	.140	.147	.152	.159	.143	
	11	—	—	—	—	—	—	—	—	—	—	
	12	.120	.115	.118	.111	.120	.095	.120	.102	.106	.106	
	13	.066	.065	.068	.076	.090	.087	.088	.085	.093	.095	
	14	.123	.129	.138	.146	.143	.157	.149	.154	.177	.154	
	15	.096	.128	.146	.159	.160	.148	.168	.180	.174	.181	
	16	.148	.149	.145	.149	.145	.136	.134	.125	.122	.112	
	17	.059	.060	.050	.051	.055	.051	.053	.016	.050	.051	
	18	—	—	—	—	—	—	—	—	—	—	
	19	.017	.036	.035	.056	.048	.067	.061	.061	.067	.071	
	20	.061	.063	.061	.070	.081	.079	.090	.097	.104	.114	
	21	.109	.112	.111	.114	.111	.112	.112	.121	.126	.129	
	22	.037	.025	.032	.054	.052	.063	.079	.083	.068	.074	
	23	.054	.054	.054	.065	.073	.085	.091	.079	.095	.092	
	24	.092	.088	.095	.097	.108	.112	.144	.151	.162	.151	
	25	—	—	—	—	—	—	—	—	—	—	
	26	.190	.193	.195	.205	.220	.173	.216	.214	.216	.216	
	27	.088	.082	.083	.083	.084	.090	.101	.101	.101	.103	
	28	.152	.160	.163	.165	.165	.173	.166	.171	.167	.166	
	29	.173	.168	.170	.177	.165	.170	.176	.171	.180	.189	
	30	.220	.217	.210	.224	.226	.228	.234	.240	.242	.240	
	31	.076	.068	.066	.062	.063	.075	.065	.065	.081	.071	
	Feb. 1	—	—	—	—	—	—	—	—	—	—	
Hourly Means	.123	.125	.126	.132	.134	.133	.137	.137	.141	.142		

Note.—Wet Thermometer higher than the Dry Thermometer where the reading appears in italics.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
98	95	96
95	94	94
73	83	73
—	—	—
84	88	90
79	90	94
100	100	97
79	84	86
90	86	88
82	81	84
—	—	—
76	73	75
71	72	78
75	76	78
71	80	78
76	75	79
63	68	60
—	—	—
75	78	81
92	93	87
94	90	83
69	68	67
76	83	86
74	77	88
—	—	—
97	97	93
78	96	86
75	88	83
92	90	90
95	98	95
77	57	63
—	—	—
82	83	83
In.	In.	In.
'179	'178	'189
'200	'194	'194
'154	'171	'150
—	—	—
'172	'176	'170
'159	'167	'174
'214	'207	'197
'154	'162	'162
'145	'146	'149
'143	'135	'139
—	—	—
'106	'098	'099
'095	'092	'092
'154	'155	'141
'181	'186	'183
'112	'109	'112
'051	'051	'043
—	—	—
'071	'075	'072
'114	'013	'106
'129	'118	'118
'074	'072	'068
'092	'101	'100
'151	'156	'167
—	—	—
'216	'209	'191
'103	'109	'106
'166	'186	'170
'189	'187	'187
'240	'244	'237
'071	'063	'068
—	—	—
'142	'140	'140

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
95	95	93	95	93	88	92	96	100	98	100	90	91
94	88	90	91	80	80	85	74	76	81	77	78	89
78	67	66	70	84	74	—	—	—	—	—	—	81
—	—	—	—	—	—	97	88	90	92	94	94	90
97	92	90	95	94	93	90	94	86	93	93	94	92
90	84	94	92	95	95	94	92	91	96	95	97	96
97	96	99	96	96	97	95	91	95	93	91	93	87
97	88	91	95	98	98	91	95	90	89	87	90	89
94	97	92	90	80	87	87	94	95	90	95	94	86
85	80	86	92	89	82	—	—	—	—	—	—	82
—	—	—	—	—	—	88	84	85	85	83	90	86
76	75	82	83	73	88	91	91	90	90	92	86	82
76	87	79	78	82	82	82	83	76	79	79	87	80
83	85	92	88	89	89	86	93	94	93	94	100	86
72	66	68	84	82	83	87	89	83	80	87	90	81
77	80	81	80	75	73	76	79	79	85	83	99	80
68	63	69	81	90	77	—	—	—	—	—	—	70
—	—	—	—	—	—	78	61	70	63	66	66	77
81	69	83	74	83	81	92	90	83	83	92	96	87
89	86	81	68	79	79	88	91	91	88	88	87	87
80	76	77	95	94	99	100	100	100	100	95	86	91
75	78	82	84	85	90	85	89	98	89	87	84	81
89	88	83	92	85	88	94	89	95	91	90	81	86
87	86	85	85	91	81	—	—	—	—	—	—	85
—	—	—	—	—	—	97	95	94	93	89	99	93
96	95	100	93	93	87	93	92	84	81	81	81	93
77	82	81	85	87	84	82	87	86	84	93	93	84
85	81	79	93	93	92	86	94	92	91	91	90	86
88	93	93	91	99	100	95	100	99	100	100	100	91
98	97	98	95	91	88	86	78	90	89	92	98	94
63	84	78	66	81	71	—	—	—	—	—	—	76
—	—	—	—	—	—	93	91	91	88	83	77	—
85	84	85	86	87	86	89	89	89	88	90	90	86
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'199	'192	'192	'195	'193	'185	'191	'190	'206	'204	'212	'199	'176
'194	'171	'170	'167	'149	'149	'140	'121	'123	'130	'125	'129	'177
'155	'133	'131	'131	'149	'133	—	—	—	—	—	—	'152
—	—	—	—	—	—	'180	'170	'172	'164	'165	'138	'149
'162	'144	'140	'150	'147	'144	'131	'119	'125	'128	'135	'149	'173
'173	'168	'183	'176	'175	'175	'178	'177	'183	'194	'191	'187	'198
'196	'194	'203	'197	'195	'198	'191	'192	'195	'190	'176	'178	'158
'178	'158	'155	'159	'163	'163	'149	'153	'145	'143	'140	'143	'142
'160	'163	'152	'145	'129	'137	'137	'147	'118	'145	'156	'155	'140
'140	'134	'145	'157	'155	'143	—	—	—	—	—	—	'140
—	—	—	—	—	—	'133	'125	'125	'121	'119	'126	'096
'091	'092	'097	'094	'076	'085	'082	'080	'078	'078	'073	'068	'095
'085	'083	'096	'098	'102	'104	'110	'112	'109	'117	'120	'136	'135
'147	'123	'126	'143	'140	'139	'122	'107	'111	'103	'103	'106	'166
'177	'163	'171	'185	'189	'183	'186	'186	'165	'157	'159	'154	'110
'105	'108	'104	'098	'090	'081	'081	'080	'075	'079	'072	'078	'050
'046	'044	'046	'053	'056	'041	—	—	—	—	—	—	'058
—	—	—	—	—	—	'059	'045	'049	'043	'045	'044	'093
'067	'054	'062	'054	'056	'052	'057	'056	'054	'053	'061	'065	'095
'108	'110	'104	'095	'107	'107	'106	'110	'110	'108	'110	'106	'062
'107	'096	'089	'095	'081	'078	'070	'063	'056	'050	'017	'040	'081
'068	'070	'072	'072	'070	'074	'062	'072	'065	'057	'052	'045	'145
'098	'093	'087	'089	'081	'079	'081	'070	'074	'087	'086	'082	'189
'160	'151	'151	'154	'160	'157	—	—	—	—	—	—	'174
—	—	—	—	—	—	'178	'169	'165	'163	'167	'189	'157
'185	'179	'179	'160	'159	'143	'158	'156	'124	'105	'097	'088	'174
'067	'115	'125	'126	'134	'137	'135	'138	'139	'138	'147	'157	'113
'172	'162	'159	'180	'178	'174	'162	'166	'164	'164	'167	'170	'168
'190	'198	'198	'200	'210	'212	'203	'219	'209	'216	'212	'216	'192
'240	'235	'248	'245	'208	'192	'181	'147	'143	'124	'108	'104	'205
'063	'075	'069	'057	'066	'055	—	—	—	—	—	—	'072
—	—	—	—	—	—	'092	'092	'085	'084	'079	'079	—
'139	'134	'135	'136	'134	'130	'132	'129	'126	'124	'123	'123	'132

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HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. FEBRUARY.	2	88	89	83	83	81	79	81	80	78	75	80	82
	3	96	98	90	83	83	83	81	84	80	78	75	69
	4	95	63	70	60	66	68	70	68	67	67	71	71
	5	71	67	78	69	60	49	49	50	52	56	69	62
	6	85	89	87	85	80	64	72	72	69	70	69	78
	7	93	96	94	78	73	79	80	79	82	80	86	90
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	67	70	77	68	69	61	58	59	59	43	62	47
	10	76	79	82	85	83	90	84	82	80	95	73	80
	11	93	96	92	89	88	86	91	89	93	89	88	93
	12	87	—	—	—	—	83	97	84	95	80	89	86
	13	83	79	80	81	71	70	70	67	68	69	84	88
	14	92	96	97	93	93	83	79	69	74	81	87	88
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	84	89	91	92	83	84	86	82	87	86	87	92
	17	94	93	96	93	93	88	88	88	83	88	87	89
	18	100	86	87	92	75	66	67	72	66	69	75	78
	19	100	80	83	76	69	65	76	62	64	72	64	25
	20	95	95	98	98	96	94	92	96	93	96	91	93
	21	86	86	89	78	74	74	80	81	80	80	73	86
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	93	88	85	89	76	72	75	77	73	77	80	81
	24	94	100	92	88	92	90	83	78	79	77	73	78
	25	68	90	90	96	88	99	80	74	75	87	81	87
	26	—	—	—	—	—	77	72	70	71	73	72	70
	27	—	—	—	100	95	80	82	83	80	82	84	78
	28	80	80	79	85	84	85	85	91	84	74	81	82
	Mar. 1	—	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	87	86	87	85	81	78	78	77	76	77	78	79
Tension of the Vapour. FEBRUARY.	2	.095	.106	.101	.108	.119	.123	.133	.134	.130	.126	.134	.136
	3	.159	.168	.167	.177	.183	.190	.194	.205	.204	.197	.187	.169
	4	.149	.102	.112	.105	.118	.129	.138	.138	.141	.140	.147	.150
	5	.145	.145	.161	.162	.144	.118	.117	.121	.121	.125	.144	.127
	6	.113	.120	.131	.137	.160	.136	.168	.166	.162	.166	.161	.168
	7	.131	.130	.128	.156	.164	.191	.192	.191	.191	.181	.194	.195
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	.068	.059	.062	.054	.055	.051	.050	.051	.055	.031	.058	.041
	10	.043	.046	.049	.061	.072	.084	.101	.099	.099	.094	.100	.099
	11	.110	.122	.102	.094	.095	.090	.095	.094	.101	.095	.090	.094
	12	.036	—	—	—	—	.070	.093	.090	.110	.099	.105	.098
	13	.113	.110	.121	.132	.126	.127	.131	.130	.136	.140	.170	.180
	14	.086	.101	.114	.122	.138	.152	.156	.141	.149	.162	.159	.158
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	.100	.105	.109	.110	.118	.124	.123	.123	.128	.123	.125	.123
	17	.099	.101	.109	.120	.133	.139	.147	.145	.140	.153	.143	.135
	18	.076	.068	.081	.089	.098	.089	.094	.104	.098	.105	.110	.109
	19	.064	.065	.067	.084	.104	.100	.120	.099	.105	.107	.101	.129
	20	.128	.129	.135	.139	.139	.137	.133	.141	.143	.163	.151	.143
	21	.123	.123	.133	.127	.128	.129	.144	.140	.130	.134	.117	.123
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	.076	.083	.083	.104	.101	.100	.105	.105	.102	.107	.104	.091
	24	.074	.074	.076	.083	.094	.092	.105	.103	.090	.087	.079	.075
	25	.032	.047	.051	.064	.067	.086	.077	.072	.075	.084	.075	.077
	26	—	—	—	—	—	.043	.044	.046	.050	.048	.044	.042
	27	—	—	—	.051	.058	.063	.073	.075	.075	.074	.075	.065
	28	.063	.064	.064	.076	.082	.089	.089	.092	.087	.080	.084	.087
	Mar. 1	—	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	.095	.098	.103	.107	.113	.111	.118	.117	.118	.118	.119	.117

OR.

9	10	11
3	4	5
75	80	82
79	75	69
67	71	74
56	69	62
70	69	78
80	86	90
—	—	—
43	62	47
95	73	80
89	88	93
80	89	86
69	84	88
83	87	88
—	—	—
86	87	92
88	87	89
69	75	78
72	64	25
96	91	93
80	73	86
—	—	—
77	80	81
77	74	78
87	81	87
73	72	70
82	84	78
74	81	82
—	—	—
77	78	79

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.			
6	7	8	9	10	11	12	13	14	15	16	17				
84	87	89	91	87	88	90	97	95	98	98	99	87			
66	64	67	74	72	86	80	95	76	91	80	79	80			
73	76	73	70	59	60	57	62	61	62	66	69	68			
61	59	71	80	74	73	78	80	82	85	89	87	69			
78	78	78	82	83	91	92	97	91	91	95	91	82			
77	70	64	70	72	69	—	—	—	—	—	—	—			
61	71	76	88	83	89	87	87	91	94	95	96	83			
80	79	87	94	95	94	94	89	91	89	91	94	72			
89	82	86	81	86	81	80	83	85	84	68	67	86			
90	93	93	94	88	85	88	93	85	81	84	86	88			
80	80	80	82	88	93	92	100	87	100	100	92	83			
57	83	78	80	76	88	—	—	—	—	—	—	87			
94	94	91	91	91	92	88	91	94	94	89	88	89			
89	90	86	86	90	84	86	92	81	96	95	85	89			
83	95	94	94	100	100	96	95	88	84	85	89	85			
77	86	97	93	100	98	97	98	93	97	96	93	82			
92	96	93	96	93	93	99	91	89	92	99	87	94			
89	87	86	82	80	75	—	—	—	—	—	—	—			
85	82	81	84	81	77	53	75	77	82	83	100	84			
79	79	83	86	85	82	87	79	90	84	59	68	80			
76	64	76	72	78	79	60	—	—	—	—	—	83			
70	68	61	—	—	—	—	—	—	—	—	—	80			
94	100	90	94	86	97	94	89	92	94	85	78	71			
71	73	71	70	74	77	—	—	—	—	—	—	88			
—	—	—	—	—	—	92	76	80	80	80	66	79			
80	81	81	84	84	85	85	88	86	89	87	86	83			
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.			
.126	.131	.126	.139	.145	.148	.160	.157	.157	.154	.164	.164	.169	.171	.165	.139
.197	.187	.169	.153	.148	.146	.155	.149	.166	.138	.170	.134	.153	.133	.130	.166
.140	.147	.150	.150	.158	.158	.152	.142	.147	.138	.142	.138	.134	.141	.141	.138
.125	.144	.127	.131	.119	.129	.148	.130	.128	.132	.126	.129	.130	.133	.122	.133
.166	.161	.158	.161	.157	.156	.161	.164	.163	.157	.151	.140	.133	.138	.133	.150
.181	.191	.195	.169	.136	.104	.091	.082	.073	—	—	—	—	—	—	—
.031	.058	.041	—	—	—	—	—	.103	.104	.106	.108	.109	.109	.108	.139
.094	.100	.089	.050	.052	.054	.059	.054	.057	.052	.052	.052	.050	.049	.044	.053
.095	.090	.094	.110	.113	.128	.128	.134	.139	.136	.126	.115	.112	.109	.113	.100
.099	.105	.098	.089	.080	.078	.072	.075	.070	.063	.066	.067	.064	.032	.030	.081
.140	.170	.180	.095	.097	.095	.096	.090	.094	.098	.110	.106	.105	.111	.115	.096
.162	.159	.158	.136	.140	.144	.142	.146	.128	.102	.096	.077	.085	.085	.086	.124
—	—	—	.154	.148	.129	.132	.127	.136	—	—	—	—	—	—	—
.123	.125	.123	.120	.120	.115	.110	.109	.106	.098	.100	.106	.109	.106	.104	.129
.153	.143	.135	.125	.121	.113	.110	.113	.100	.094	.095	.100	.103	.105	.107	.112
.105	.110	.109	.086	.091	.071	.071	.074	.073	.066	.061	.059	.053	.053	.055	.080
.107	.101	.129	.121	.136	.134	.131	.140	.138	.136	.135	.121	.129	.127	.124	.113
.163	.151	.143	.136	.136	.120	.135	.135	.135	.139	.130	.127	.133	.131	.127	.136
.134	.117	.123	.123	.123	.112	.105	.092	.084	—	—	—	—	—	—	—
—	—	—	.097	.085	.088	.082	.080	.080	.089	.092	.086	.086	.090	.079	.113
.107	.104	.091	.087	.079	.075	.075	.070	.050	.068	.069	.069	.067	.079	.079	.086
.084	.075	.077	.070	.060	.059	.056	.051	.045	.050	.052	.044	.029	.032	.032	.068
.048	.044	.042	.064	.049	.052	.043	.048	.047	.028	—	—	—	—	—	.060
.074	.075	.065	.048	.032	.031	—	—	—	—	—	—	—	—	—	.043
.080	.084	.087	.075	.076	.070	.071	.066	.072	.071	.068	.071	.072	.065	.062	.069
—	—	—	.073	.074	.070	.068	.070	.070	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	.090	.070	.072	.072	.072	.072	.057	.076
.118	.119	.117	.111	.108	.104	.108	.106	.104	.100	.104	.099	.099	.096	.094	.107

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Ther. <small>Ther. p.</small>	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Ther.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. MARCH.	2	72	88	92	98	94	70	83	64	86	78	68	
	3	79	79	64	75	65	70	68	72	77	78	72	
	4	82	70	79	81	78	68	79	71	77	79	76	
	5	78	79	73	72	64	58	70	73	69	52	72	66
	6	90	95	88	81	78	77	71	79	78	77	78	83
	7	76	85	91	96	89	92	91	95	98	97	94	95
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	75	73	70	68	67	71	74	75	72	78	81	82
	10	86	98	73	71	68	72	68	63	67	61	59	58
	11	90	91	87	—	71	72	75	71	69	69	60	67
	12	83	84	82	77	74	69	75	81	94	94	95	93
	13	93	95	95	97	99	98	99	97	97	100	97	100
	14	98	96	96	88	82	90	80	80	84	81	72	90
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	78	77	67	87	70	72	68	70	78	86	83	88
	17	75	77	83	70	67	69	73	67	64	63	65	72
	18	83	83	80	70	67	50	64	65	66	61	68	72
	19	83	74	60	57	45	52	50	52	57	60	61	63
	20	91	95	89	56	81	81	73	61	67	71	67	75
	21	71	66	68	61	73	61	56	56	59	57	46	50
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	80	78	73	69	67	61	76	61	70	67	67	68
	24	95	94	92	89	89	91	91	92	92	87	91	92
	25	94	93	93	97	93	95	96	96	98	97	98	97
	26	96	89	91	84	84	75	81	68	65	74	81	83
	27	93	91	89	84	81	79	80	80	73	78	84	87
	28	91	88	85	82	70	71	73	73	74	80	80	76
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	90	81	79	54	58	55	55	66	69	66	75	70
	31	95	82	70	70	68	67	73	74	70	74	81	93
	Hourly Means	85	85	81	78	75	73	75	73	76	76	76	78
	Tension of the Vapour. MARCH.	2	In. .061	In. .077	In. .093	In. .015	In. .122	In. .096	In. .110	In. .091	In. .123	In. .112	In. .100
3		.057	.059	.059	.097	.100	.116	.113	.121	.129	.131	.121	.126
4		.073	.079	.113	.150	.154	.142	.173	.163	.175	.175	.168	.161
5		.143	.138	.140	.149	.146	.140	.158	.167	.167	.144	.174	.184
6		.140	.148	.141	.141	.129	.127	.123	.132	.131	.127	.129	.139
7		.056	.075	.095	.127	.135	.146	.149	.050	.159	.166	.160	.160
8		—	—	—	—	—	—	—	—	—	—	—	—
9		.146	.141	.140	.144	.151	.155	.163	.165	.152	.167	.171	.172
10		.136	.135	.151	.164	.161	.172	.162	.152	.163	.159	.146	.159
11		.131	.130	.157	—	.173	.170	.177	.172	.166	.169	.147	.165
12		.161	.179	.186	.190	.197	.191	.202	.227	.239	.229	.230	.227
13		.218	.226	.220	.237	.216	.252	.262	.261	.268	.278	.289	.277
14		.203	.201	.219	.205	.197	.214	.192	.193	.192	.187	.161	.171
15		—	—	—	—	—	—	—	—	—	—	—	—
16		.128	.127	.112	.138	.113	.120	.111	.117	.137	.152	.155	.168
17		.108	.110	.119	.108	.107	.112	.126	.125	.130	.133	.134	.140
18		.103	.115	.119	.123	.140	.117	.146	.154	.159	.148	.164	.161
19		.168	.162	.137	.156	.150	.161	.159	.180	.176	.180	.155	.159
20		.142	.159	.193	.156	.205	.229	.210	.193	.217	.220	.196	.200
21		.133	.125	.129	.116	.140	.120	.115	.119	.130	.129	.108	.118
22		—	—	—	—	—	—	—	—	—	—	—	—
23		.160	.163	.165	.165	.169	.168	.177	.169	.185	.171	.173	.171
24		.222	.222	.225	.222	.222	.218	.218	.220	.224	.224	.218	.224
25		.220	.229	.222	.231	.230	.240	.242	.246	.247	.246	.238	.231
26		.195	.186	.199	.219	.226	.216	.231	.201	.207	.208	.198	.192
27		.194	.200	.204	.206	.222	.212	.220	.214	.211	.202	.210	.198
28		.180	.176	.182	.183	.168	.184	.179	.176	.180	.182	.179	.164
29		—	—	—	—	—	—	—	—	—	—	—	—
30		.159	.158	.158	.112	.129	.126	.152	.164	.167	.157	.170	.161
31		.049	.151	.146	.136	.163	.177	.183	.185	.179	.189	.201	.130
Hourly Means		.142	.149	.155	.156	.164	.166	.171	.168	.177	.176	.173	.170



HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
78	68	70
78	72	78
79	76	70
82	72	66
77	78	83
97	94	95
—	—	—
78	81	82
61	59	58
69	60	67
94	95	93
100	97	100
81	72	90
—	—	—
86	83	88
63	65	72
61	68	72
60	61	63
71	67	63
57	46	50
—	—	—
67	67	68
87	91	92
97	98	97
88	92	90
88	91	87
83	87	79
—	—	—
71	78	80
61	70	72
—	—	—
76	76	78

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
67	80	77	78	80	85	86	96	87	83	79	80	81
64	83	93	97	97	97	93	99	74	73	81	82	80
67	72	75	72	72	79	87	87	87	78	77	73	77
59	48	62	68	56	59	66	79	81	85	97	98	70
83	83	85	94	82	87	88	99	96	100	96	95	86
94	94	91	95	97	95	—	—	—	—	—	—	—
—	—	—	—	—	—	67	68	71	69	70	74	87
85	83	85	80	80	82	81	79	82	89	100	—	76
66	74	80	73	85	82	88	91	86	89	94	92	77
70	73	74	83	84	83	87	88	88	86	89	89	79
93	95	95	94	99	100	98	100	100	100	98	97	90
99	97	99	100	100	100	100	97	97	97	96	98	98
87	86	82	78	79	79	—	—	—	—	—	—	—
—	—	—	—	—	—	90	87	70	87	94	80	85
72	74	80	87	85	86	78	80	83	85	86	86	79
89	84	81	87	81	88	91	88	78	61	71	87	76
76	74	73	73	69	67	69	73	70	80	76	78	71
69	66	70	74	86	83	93	95	95	99	97	96	72
74	71	63	90	81	69	71	71	69	65	70	76	75
56	68	76	86	79	76	—	—	—	—	—	—	—
—	—	—	—	—	—	78	75	70	75	79	78	68
62	78	67	85	88	89	90	88	89	86	95	94	77
92	84	87	93	86	88	88	94	92	93	95	94	91
97	97	97	83	83	81	82	88	89	90	91	91	92
88	92	89	90	92	90	91	93	97	91	97	93	87
88	91	87	87	87	91	91	88	88	90	90	88	86
83	87	79	79	84	86	—	—	—	—	—	—	—
—	—	—	—	—	—	91	91	86	84	92	91	82
71	78	80	85	85	91	100	87	93	93	93	96	78
61	70	72	73	78	73	76	89	90	75	75	75	76
—	—	—	—	—	—	—	—	—	—	—	—	—
77	80	81	84	84	84	85	87	85	85	88	87	81
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*083	*076	*072	*065	*068	*061	*060	*064	*060	*061	*055	*060	*079
*093	*106	*097	*096	*086	*094	*110	*115	*090	*080	*080	*078	*099
*160	*167	*168	*157	*156	*161	*155	*170	*163	*152	*156	*142	*151
*150	*117	*133	*112	*101	*098	*097	*121	*126	*139	*153	*153	*140
*113	*093	*085	*082	*070	*074	*065	*073	*068	*069	*068	*066	*106
*157	*157	*156	*162	*163	*156	—	—	—	—	—	—	—
—	—	—	—	—	—	*138	*112	*115	*135	*137	—	*136
*169	*147	*139	*114	*150	*156	*158	*158	*160	*162	*171	—	*156
*140	*127	*126	*118	*127	*122	*126	*132	*127	*133	*133	—	*141
*160	*151	*150	*160	*162	*163	*157	*156	*153	*151	*158	—	*158
*169	*147	*163	*227	*218	*224	*212	*216	*210	*213	*217	—	*220
*229	*230	*227	*351	*236	*221	*220	*218	*218	*220	*201	*201	*235
*278	*289	*277	*167	*152	*144	*137	*136	*136	—	—	—	—
*187	*161	*174	—	—	—	—	—	—	—	—	—	—
—	—	—	*126	*120	*124	*121	*117	*115	*111	*115	—	*171
*152	*155	*168	*161	*133	*122	*125	*115	*115	*110	*105	*094	*118
*133	*134	*140	*151	*143	*136	*140	*136	*128	*130	*146	*160	*116
*148	*163	*161	*164	*148	*147	*147	*151	*139	*148	*159	*154	*141
*180	*155	*159	*185	*174	*167	*165	*193	*158	*152	*150	*145	*156
*220	*196	*200	*124	*134	*134	*132	*118	*116	—	—	—	*176
*129	*108	*118	—	—	—	—	—	—	—	—	—	—
—	—	—	*156	*184	*155	*195	*204	*210	*147	*151	*143	*131
—	—	—	*224	*214	*227	*239	*225	*220	*214	*212	*214	*185
*171	*173	*171	*232	*230	*233	*198	*194	*189	*214	*219	*211	*221
*224	*218	*224	*203	*202	*203	*198	*194	*186	*192	*192	*188	*218
*246	*238	*231	*204	*202	*195	*194	*196	*191	*195	*197	*202	*202
*208	*198	*192	*204	*210	*200	*196	*191	*200	*197	*186	*183	*208
*202	*210	*198	*171	*174	*160	*160	*163	*168	—	—	—	*176
*182	*179	*164	—	—	—	—	—	—	*147	*151	*148	*168
—	—	—	*157	*160	*158	*131	*141	*146	*181	*158	*165	*154
*157	*170	*161	*160	*149	*148	*140	*140	*136	*126	*133	*132	*147
*189	*201	*130	—	—	—	—	—	—	—	—	—	—
*176	*173	*170	—	—	—	—	—	—	—	—	—	—
—	—	—	*165	*159	*154	*153	*153	*151	*152	*150	*149	*159

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. APRIL.	1	81	98	70	56	60	53	58	64	61	53	49	59
	2	81	73	64	59	59	66	57	54	51	49	52	52
	3	74	69	49	50	55	56	60	52	42	38	34	41
	4	72	64	72	69	63	67	64	66	61	53	54	48
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	81	82	79	79	75	72	71	69	74	73	76	86
	7	85	82	71	70	63	66	65	66	76	68	75	80
	8	63	56	62	53	53	53	47	40	35	36	41	35
	9	88	75	54	63	68	50	50	46	45	49	53	58
	10*	—	—	—	—	—	—	—	—	—	—	—	—
	11	95	96	95	97	86	77	61	51	47	54	62	59
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	90	88	86	82	63	69	67	62	54	45	50	55
	14	95	85	66	70	67	60	62	66	70	50	57	80
	15	78	78	78	69	79	78	68	63	85	58	33	56
	16	90	83	53	72	62	62	65	54	53	59	67	65
	17	83	73	73	62	67	59	60	60	57	57	57	52
	18	55	64	81	82	87	79	85	74	78	69	69	66
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	89	80	81	71	67	62	62	57	50	50	50	53
	21	69	66	58	53	55	51	46	50	28	35	74	60
	22	88	84	83	84	82	78	76	77	79	77	75	80
	23	86	89	99	91	86	80	75	75	70	72	66	75
	24	83	85	85	82	80	84	80	89	87	93	96	96
	25	68	67	69	67	67	67	62	54	57	55	54	56
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	56	50	38	43	44	44	46	47	51	49	47	47
	28	56	42	46	43	44	40	42	45	51	47	50	41
	29	88	90	91	88	85	86	85	88	91	93	94	96
	30	94	94	88	88	93	91	88	85	91	86	89	91
	Hourly Means	80	77	72	70	68	66	64	62	62	59	61	63
Tension of the Vapour. APRIL.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
	1	*131	*165	*144	*154	*149	*137	*151	*164	*162	*140	*133	*150
	2	*134	*140	*146	*140	*140	*166	*148	*139	*132	*130	*131	*130
	3	*130	*143	*121	*127	*145	*153	*171	*145	*131	*112	*104	*115
	4	*146	*150	*176	*183	*178	*196	*194	*198	*200	*183	*189	*168
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	*214	*211	*209	*222	*250	*262	*261	*266	*273	*265	*279	*257
	7	*243	*249	*243	*264	*266	*282	*267	*277	*302	*284	*326	*316
	8	*123	*113	*132	*114	*121	*131	*113	*102	*091	*091	*110	*091
	9	*119	*144	*120	*165	*182	*146	*154	*151	*153	*162	*148	*141
	10*	—	—	—	—	—	—	—	—	—	—	—	—
	11	*224	*225	*224	*339	*329	*325	*266	*204	*160	*162	*175	*152
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	*134	*134	*132	*134	*116	*134	*139	*153	*122	*106	*118	*117
	14	*146	*168	*153	*181	*185	*174	*170	*182	*189	*130	*162	*201
	15	*133	*132	*132	*123	*158	*164	*156	*149	*218	*146	*140	*148
	16	*136	*161	*124	*180	*172	*172	*182	*162	*164	*180	*172	*158
	17	*160	*191	*216	*228	*257	*241	*249	*256	*239	*249	*254	*233
	18	*243	*250	*304	*331	*301	*295	*300	*316	*314	*312	*308	*307
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	*155	*192	*230	*223	*241	*252	*272	*279	*269	*270	*264	*258
	21	*200	*264	*275	*295	*325	*337	*334	*351	*369	*291	*393	*332
	22	*240	*243	*242	*250	*249	*242	*254	*276	*283	*375	*281	*267
	23	*297	*328	*362	*302	*307	*303	*303	*314	*302	*308	*278	*323
	24	*302	*320	*320	*314	*318	*341	*336	*395	*361	*398	*416	*425
	25	*190	*190	*194	*172	*172	*181	*165	*156	*177	*162	*155	*162
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	*152	*174	*150	*196	*205	*203	*208	*204	*219	*215	*224	*222
	28	*176	*170	*185	*174	*175	*174	*182	*198	*232	*236	*254	*221
	29	*273	*275	*277	*291	*296	*295	*305	*299	*302	*308	*305	*324
	30	*318	*329	*326	*311	*318	*348	*364	*379	*412	*360	*378	*374
Hourly Means	*189	*202	*205	*217	*222	*226	*226	*229	*227	*223	*228	*225	

\* Good Friday.

H.		
9	10	11
3	4	5
53	49	59
49	52	52
38	34	41
53	54	48
—	—	—
73	76	86
68	75	80
36	41	35
49	53	58
—	—	—
54	62	59
—	—	—
45	50	53
50	57	80
58	33	56
59	67	65
57	57	52
69	69	66
—	—	—
50	50	53
35	74	60
77	75	80
72	66	75
93	96	96
55	54	56
—	—	—
49	47	47
47	50	41
93	94	96
86	89	91
—	—	—
59	61	63
—	—	—
In.	In.	In.
*140	*133	*150
*130	*131	*139
*112	*104	*115
*183	*189	*168
—	—	—
*266	*279	*297
*284	*326	*316
*094	*110	*091
*162	*148	*141
—	—	—
*162	*175	*152
—	—	—
*106	*118	*117
*130	*162	*204
*146	*140	*148
*180	*172	*153
*249	*254	*233
*312	*308	*307
—	—	—
*270	*264	*258
*291	*393	*332
*375	*281	*267
*308	*278	*323
*398	*416	*435
*162	*155	*162
—	—	—
*215	*224	*222
*236	*254	*221
*308	*305	*324
*360	*378	*374
—	—	—
*223	*228	*225

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
67	69	71	67	76	70	70	71	80	85	89	76	69
57	66	77	87	81	70	70	77	73	76	78	77	67
56	59	59	73	70	70	70	67	69	78	87	85	61
57	55	50	62	66	76	—	—	—	—	—	—	—
—	—	—	—	—	—	95	94	90	91	84	82	69
81	81	83	89	88	95	87	89	89	90	89	87	82
88	88	86	89	77	72	73	68	71	69	62	69	74
36	49	52	61	57	55	78	78	83	86	85	89	58
60	62	73	61	67	71	—	—	—	—	—	—	—
—	—	—	—	—	—	72	82	81	84	92	90	66
59	61	64	64	69	70	—	—	—	—	—	—	—
—	—	—	—	—	—	85	86	96	90	87	92	75
70	75	70	82	80	80	77	83	85	89	89	90	74
90	95	98	99	96	94	88	62	68	76	76	70	77
68	78	86	87	92	92	93	—	92	95	95	95	78
68	76	73	75	75	81	75	79	—	78	81	89	71
54	68	72	82	84	90	90	93	85	93	79	63	71
91	57	70	74	84	78	—	—	—	—	—	—	—
—	—	—	—	—	—	87	87	92	86	88	93	78
57	56	59	60	66	74	66	55	73	70	67	68	64
79	80	86	91	94	94	93	94	95	90	91	89	72
82	86	87	89	93	93	90	91	86	88	94	86	85
69	67	72	68	65	63	53	55	57	72	72	84	74
97	99	95	96	98	95	92	95	95	96	85	76	90
56	60	66	68	56	56	—	—	—	—	—	—	—
—	—	—	—	—	—	64	60	57	57	63	61	61
51	59	60	66	61	67	65	64	75	73	80	76	57
40	41	58	62	67	86	90	94	95	91	90	93	61
95	95	91	94	93	94	92	95	95	94	94	94	92
88	90	93	96	95	94	95	95	96	93	91	98	92
—	—	—	—	—	—	—	—	—	—	—	—	—
64	74	74	78	78	79	80	80	82	84	83	83	73
—	—	—	—	—	—	—	—	—	—	—	—	—
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*160	*131	*129	*112	*121	*115	*114	*111	*121	*123	*126	*116	*136
*150	*127	*129	*142	*133	*115	*118	*127	*121	*126	*127	*122	*133
*156	*122	*118	*132	*136	*143	*146	*133	*128	*131	*156	*153	*135
*174	*162	*147	*169	*175	*189	—	—	—	—	—	—	—
—	—	—	—	—	—	*303	*295	*284	*286	*155	*125	*193
*280	*277	*274	*276	*278	*282	*261	*263	*260	*252	*214	*233	*258
*330	*321	*309	*288	*252	*214	*218	*180	*171	*150	*134	*139	*251
*095	*110	*108	*119	*101	*099	*124	*119	*120	*122	*124	*120	*112
*139	*136	*160	*132	*136	*145	—	—	—	—	—	—	—
—	—	—	—	—	—	*191	*113	*209	*213	*225	*214	*158
*139	*140	*142	*138	*143	*143	—	—	—	—	—	—	—
—	—	—	—	—	—	*126	*127	*135	*133	*128	*136	*184
*146	*145	*145	*126	*121	*126	*123	*130	*129	*139	*139	*140	*130
*219	*112	*209	*212	*200	*197	*175	*128	*122	*131	*130	*124	*167
*162	*159	*152	*139	*140	*140	*138	—	*136	*134	*134	*130	*146
*164	*185	*177	*187	*180	*195	*180	*189	—	*182	*171	*170	*171
*237	*260	*248	*241	*234	*238	*228	*222	*225	*236	*243	*250	*235
*312	*226	*249	*259	*248	*208	—	—	—	—	—	—	—
—	—	—	—	—	—	*159	*162	*162	*151	*147	*148	*251
*253	*243	*251	*249	*247	*230	*213	*198	*219	*207	*265	*209	*235
*659	*343	*336	*340	*348	*346	*334	*333	*338	*268	*248	*240	*312
*258	*251	*243	*251	*262	*268	*277	*283	*266	*270	*304	*280	*267
*293	*278	*284	*273	*272	*270	*234	*232	*237	*265	*260	*310	*289
*408	*320	*294	*298	*320	*329	*320	*339	*339	*335	*294	*223	*336
*162	*169	*181	*183	*165	*165	—	—	—	—	—	—	—
—	—	—	—	—	—	*156	*154	*143	*144	*151	*145	*166
*225	*207	*179	*186	*172	*182	*178	*174	*182	*174	*176	*167	*191
*201	*194	*214	*214	*221	*252	*263	*286	*309	*309	*304	*300	*227
*323	*323	*306	*305	*300	*299	*292	*303	*300	*304	*304	*309	*301
*362	*319	*343	*344	*348	*340	*342	*341	*351	*342	*350	*358	*349
—	—	—	—	—	—	—	—	—	—	—	—	—
*227	*212	*212	*213	*210	*209	*209	*206	*209	*205	*199	*194	*214

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Getting Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. MAY.	1	86	85	84	85	77	75	80	82	75	76	94	
	2	80	79	73	68	76	71	75	82	80	83	79	
	3	—	—	—	—	—	—	—	—	—	—	—	
	4	83	72	78	67	63	55	54	52	54	55	54	84
	5	87	72	66	76	77	75	70	65	74	70	72	80
	6	80	63	55	56	60	60	57	58	49	51	49	50
	7	52	46	43	45	56	60	65	67	73	70	76	76
	8	80	85	82	75	68	67	67	78	69	67	71	76
	9	96	95	94	95	93	96	95	96	96	96	97	94
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	66	52	52	60	60	60	56	46	49	55	45	44
	12	63	59	52	55	48	47	66	64	61	58	63	54
	13	89	88	90	84	83	80	79	67	59	59	56	56
	14	97	93	90	83	79	74	73	74	67	69	64	62
	15	97	94	92	90	87	82	78	88	89	92	84	86
	16	74	89	85	81	78	66	81	79	77	77	75	71
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	86	84	71	65	61	50	50	35	42	44	41	38
	19	74	65	59	46	53	62	62	63	58	59	64	65
	20	74	63	54	50	42	36	35	32	40	31	30	30
	21	61	56	65	67	66	66	71	66	68	59	63	61
	22	75	69	70	64	64	60	53	56	49	47	47	67
	23	92	89	89	96	90	87	89	47	73	71	74	72
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	95	87	90	88	89	87	88	88	86	90	92	92
	26	96	92	86	85	83	82	81	81	83	80	80	81
	27	92	80	73	67	66	63	61	57	54	56	53	57
	28	92	83	80	86	85	80	84	80	79	77	80	76
	29	86	80	68	69	74	71	73	72	69	72	71	77
	30	92	94	93	92	89	87	87	84	84	78	76	76
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	83	77	74	73	72	69	70	68	68	67	67	69	
Tension of the Vapour. MAY.	1	In. '346	In. '349	In. '347	In. '350	In. '340	In. '336	In. '348	In. '356	In. '338	In. '329	In. '347	In. '375
	2	'313	'325	'331	'335	'340	'388	'366	'395	'392	'392	'392	'373
	3	—	—	—	—	—	—	—	—	—	—	—	—
	4	'222	'285	'363	'339	'350	'331	'329	'308	'322	'327	'345	'376
	5	'264	'276	'243	'377	'332	'312	'330	'356	'415	'417	'410	'398
	6	'336	'272	'245	'246	'241	'236	'217	'224	'199	'222	'216	'224
	7	'180	'183	'180	'192	'232	'265	'301	'314	'316	'312	'311	'311
	8	'312	'362	'371	'374	'354	'364	'361	'393	'372	'338	'345	'353
	9	'404	'404	'413	'404	'400	'402	'404	'419	'419	'419	'430	'428
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	'135	'112	'112	'133	'163	'148	'148	'124	'142	'168	'144	'140
	12	'180	'188	'187	'114	'204	'218	'321	'308	'316	'302	'327	'310
	13	'245	'237	'290	'346	'388	'412	'407	'390	'386	'389	'382	'389
	14	'398	'438	'457	'485	'485	'436	'438	'453	'437	'401	'446	'402
	15	'353	'343	'328	'343	'358	'348	'366	'417	'412	'454	'462	'430
	16	'249	'305	'353	'391	'390	'391	'419	'421	'405	'397	'408	'379
	17	—	—	—	—	—	—	—	—	—	—	—	—
	18	'353	'343	'284	'274	'256	'221	'219	'145	'168	'175	'162	'144
	19	'176	'176	'172	'151	'80	'228	'224	'236	'237	'251	'274	'265
	20	'208	'215	'214	'229	'24	'212	'209	'194	'250	'193	'189	'183
	21	'167	'162	'195	'204	'209	'211	'229	'221	'237	'220	'226	'215
	22	'200	'222	'238	'261	'274	'283	'238	'249	'230	'208	'210	'269
	23	'329	'366	'397	'442	'477	'460	'540	'519	'519	'470	'472	'450
	24	—	—	—	—	—	—	—	—	—	—	—	—
	25	'495	'529	'584	'611	'620	'594	'653	'662	'676	'647	'618	'639
	26	'556	'562	'614	'638	'618	'614	'652	'709	'674	'644	'613	'616
	27	'562	'616	'592	'551	'535	'541	'522	'493	'482	'484	'485	'538
	28	'454	'473	'485	'529	'592	'535	'579	'607	'572	'522	'518	'506
	29	'395	'419	'435	'476	'536	'487	'524	'514	'504	'500	'482	'449
	30	'462	'450	'486	'518	'625	'643	'659	'655	'630	'605	'585	'586
	31	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	'319	'331	'342	'358	'376	'370	'385	'389	'387	'376	'378	'365	

H.		
9	10	11
3	4	5
76	85	91
83	83	79
—	—	—
55	54	81
70	72	80
51	49	50
70	76	76
67	71	76
96	97	91
—	—	—
55	45	44
58	63	54
59	56	56
69	64	62
92	84	86
77	75	71
—	—	—
44	41	38
59	61	65
31	30	30
59	63	61
47	47	67
71	74	72
—	—	—
90	92	92
80	80	81
56	53	57
77	80	76
72	71	77
78	76	76
—	—	—
67	67	69
In.	In.	In.
*329	*347	*375
*392	*392	*373
—	—	—
*327	*345	*376
*417	*410	*398
*222	*216	*224
*312	*341	*311
*338	*345	*353
*419	*430	*428
—	—	—
*168	*144	*140
*302	*327	*310
*389	*382	*389
*401	*446	*402
*454	*462	*430
*397	*408	*379
—	—	—
*175	*162	*144
*251	*274	*265
*193	*189	*183
*220	*226	*215
*208	*210	*269
*470	*470	*450
—	—	—
*647	*618	*639
*644	*613	*616
*484	*485	*538
*522	*518	*506
*500	*482	*449
*605	*585	*586
—	—	—
*376	*378	*365

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
91	91	91	90	93	93	96	94	94	94	91	86	87	
83	85	90	90	90	89	—	—	—	—	—	—	81	
—	—	—	—	—	—	76	83	86	87	82	83	81	
52	61	72	75	73	79	83	80	83	83	81	87	70	
81	80	86	90	89	88	91	83	85	85	81	85	80	
52	62	60	59	70	68	68	70	69	68	73	66	61	
80	82	85	87	86	81	83	83	89	91	93	91	73	
79	82	81	83	88	90	91	90	92	93	91	96	82	
91	96	91	91	96	96	—	—	—	—	—	—	87	
—	—	—	—	—	—	54	58	58	65	65	63	—	
45	54	60	67	68	61	63	67	67	61	62	70	58	
71	68	82	87	80	81	82	86	88	90	88	87	70	
57	65	73	75	68	77	85	89	91	97	95	96	77	
71	69	77	77	72	76	78	83	87	95	96	96	79	
66	73	76	79	82	84	89	88	86	88	89	84	85	
77	78	85	85	90	91	—	—	—	—	—	—	82	
—	—	—	—	—	—	78	79	91	92	89	86	—	
59	42	50	55	57	59	59	72	72	74	76	78	58	
69	49	62	83	87	88	84	77	70	71	72	70	67	
37	45	54	62	56	68	60	61	73	70	84	80	53	
63	69	71	82	83	86	86	87	87	85	85	83	72	
66	69	58	57	59	56	77	78	90	88	91	95	67	
71	71	82	85	85	85	—	—	—	—	—	—	84	
—	—	—	—	—	—	92	95	96	97	99	92	—	
88	90	92	97	98	98	98	95	95	95	95	95	92	
80	87	96	90	93	94	95	95	94	95	95	96	88	
66	58	71	84	84	91	95	91	92	91	90	91	71	
75	65	65	78	90	83	81	88	95	91	88	91	82	
75	79	81	77	77	76	77	86	88	91	91	94	78	
76	78	80	89	86	89	—	—	—	—	—	—	87	
—	—	—	—	—	—	92	92	93	91	92	92	—	
70	71	76	80	81	82	84	83	85	86	87	86	76	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
*367	*362	*366	*367	*391	*362	*361	*354	*354	*355	*350	*332	*353	
*401	*362	*326	*302	*291	*301	—	—	—	—	—	—	—	
—	—	—	—	—	—	*222	*228	*223	*220	*209	*208	*320	
*302	*293	*296	*274	*257	*252	*255	*229	*225	*217	*216	*217	*280	
*367	*368	*359	*338	*336	*337	*349	*308	*311	*311	*303	*311	*310	
*214	*227	*199	*191	*211	*195	*207	*199	*181	*190	*167	*167	*219	
*319	*310	*334	*312	*291	*275	*283	*288	*298	*313	*306	*318	*286	
*377	*374	*365	*363	*390	*393	*397	*391	*392	*391	*383	*397	*372	
*437	*448	*454	*457	*462	*464	—	—	—	—	—	—	—	
—	—	—	—	—	—	*149	*146	*134	*139	*133	*131	*342	
*146	*165	*153	*175	*169	*156	*159	*172	*172	*169	*163	*191	*152	
*326	*279	*257	*251	*225	*210	*209	*195	*199	*209	*226	*233	*241	
*396	*351	*355	*310	*374	*428	*427	*460	*450	*439	*403	*396	*378	
*386	*379	*404	*401	*380	*384	*467	*477	*491	*433	*432	*364	*428	
*303	*301	*297	*283	*286	*287	*276	*267	*263	*262	*260	*250	*333	
*381	*363	*339	*309	*308	*312	—	—	—	—	—	—	—	
—	—	—	—	—	—	*345	*345	*389	*395	*375	*359	*364	
*141	*132	*144	*150	*146	*148	*147	*161	*152	*158	*155	*160	*180	
*264	*179	*203	*204	*204	*205	*197	*195	*184	*186	*191	*180	*207	
*296	*211	*222	*217	*206	*248	*187	*187	*197	*183	*179	*181	*205	
*220	*200	*195	*191	*191	*193	*188	*187	*180	*169	*168	*167	*198	
*264	*266	*221	*216	*217	*216	*272	*256	*287	*285	*305	*309	*250	
*126	*401	*408	*403	*400	*400	—	—	—	—	—	—	—	
—	—	—	—	—	—	*334	*336	*327	*367	*422	*424	*420	
*651	*636	*583	*562	*550	*532	*511	*488	*489	*506	*468	*506	*375	
*557	*559	*540	*495	*490	*493	*478	*491	*481	*500	*491	*502	*566	
*519	*490	*465	*459	*460	*429	*426	*400	*389	*394	*384	*398	*485	
*555	*475	*418	*411	*437	*405	*391	*390	*369	*331	*311	*317	*469	
*446	*451	*429	*402	*403	*403	*418	*455	*443	*459	*470	*471	*457	
*586	*512	*480	*513	*508	*508	—	—	—	—	—	—	—	
—	—	—	—	—	—	*423	*408	*402	*415	*409	*437	*521	
*371	*351	*339	*331	*330	*327	*310	*309	*308	*307	*305	*307	*345	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Springen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JUNE.	1	94	87	83	86	97	92	85	85	87	84	78
	2	93	92	93	89	92	92	87	87	84	82	75
	3	94	86	78	76	90	82	73	74	62	71	71
	4	96	92	93	93	88	91	83	80	84	86	82
	5	81	81	90	92	91	90	88	82	81	86	87
	6	82	77	78	66	67	62	58	60	60	69	59
	7	—	—	—	—	—	—	—	—	—	—	—
	8	87	61	70	64	60	61	62	64	61	60	61
	9	70	69	63	74	62	54	58	61	59	62	63
	10	81	75	70	56	66	73	73	72	61	67	65
	11	76	74	73	71	70	76	80	82	81	75	80
	12	61	57	53	53	62	61	64	63	62	59	59
	13	79	71	75	70	73	75	70	66	71	73	88
	14	—	—	—	—	—	—	—	—	—	—	—
	15	90	83	71	68	74	73	77	73	72	63	70
	16	77	73	67	61	65	65	72	71	70	69	75
	17	83	77	71	72	69	66	70	71	70	68	73
	18	91	91	88	85	84	79	81	80	93	87	90
	19	94	93	91	91	88	87	78	64	59	48	43
	20	78	79	77	78	79	77	75	68	68	71	67
	21	—	—	—	—	—	—	—	—	—	—	—
	22	75	71	71	63	56	41	50	40	35	40	35
	23	62	60	58	52	48	43	44	42	42	40	40
	24	61	69	55	49	44	38	31	34	30	46	26
	25	49	45	49	48	36	37	35	36	35	54	54
	26	66	66	67	65	58	57	57	56	54	49	67
	27	86	84	81	76	71	70	66	71	67	69	72
	28	—	—	—	—	—	—	—	—	—	—	—
	29	94	94	93	87	82	78	77	70	74	76	69
	30	84	77	73	72	74	67	65	64	67	59	59
Hourly Means	80	77	71	72	71	69	67	66	66	66	66	
Tension of the Vapour. JUNE.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	474	514	518	509	523	556	550	597	602	579	600
	2	528	523	553	592	571	574	484	529	521	509	469
	3	415	438	436	474	505	507	430	430	415	485	494
	4	492	539	532	535	535	527	546	562	522	450	442
	5	355	348	371	381	377	368	375	377	381	452	413
	6	240	266	287	277	287	276	272	265	283	279	277
	7	—	—	—	—	—	—	—	—	—	—	—
	8	285	264	350	349	346	378	381	393	376	375	403
	9	257	301	311	466	418	369	378	395	408	433	438
	10	323	354	346	353	418	512	518	547	520	562	543
	11	359	411	436	481	497	496	480	451	463	475	496
	12	238	236	238	264	331	319	345	345	318	310	321
	13	380	404	409	427	442	442	418	393	433	424	379
	14	—	—	—	—	—	—	—	—	—	—	—
	15	464	473	455	515	608	590	614	606	610	520	585
	16	393	409	408	426	449	427	484	485	482	481	516
	17	367	419	454	512	513	511	570	590	590	606	621
	18	494	525	520	603	657	650	693	737	716	625	785
	19	617	636	618	645	657	730	709	647	571	475	425
	20	389	392	388	397	408	388	377	360	359	353	335
	21	—	—	—	—	—	—	—	—	—	—	—
	22	310	306	335	324	328	282	302	270	235	266	288
	23	293	326	333	356	354	340	279	341	354	332	36
	24	316	409	343	337	342	325	293	320	287	415	254
	25	305	307	372	396	347	371	366	405	551	534	529
	26	387	393	435	446	477	487	482	476	504	486	575
	27	485	553	519	504	489	522	521	524	466	469	507
	28	—	—	—	—	—	—	—	—	—	—	—
	29	570	563	582	585	631	623	624	609	626	649	623
30	575	589	599	615	645	614	612	595	629	557	565	
Hourly Means	397	419	433	452	468	469	467	469	470	465	470	

R.

9	10	11
3	4	5
84	78	80
82	75	77
71	71	71
86	82	91
86	87	87
69	59	41
—	—	—
60	61	64
62	63	54
67	65	69
75	80	87
59	59	56
73	88	65
—	—	—
63	70	50
69	75	72
68	73	73
87	90	81
48	43	49
71	67	68
—	—	—
40	45	47
40	40	35
46	26	35
51	54	37
49	67	60
69	72	71
—	—	—
76	69	69
59	59	58
—	—	—
66	66	61

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
85	89	91	87	90	93	91	92	92	95	91	94	89
78	82	62	73	84	88	91	91	94	91	93	92	86
70	76	81	87	94	93	93	93	93	94	94	96	83
91	92	96	96	99	97	94	81	87	85	82	79	89
88	88	79	86	75	74	71	72	80	82	83	82	83
47	57	77	80	86	89	—	—	—	—	—	—	71
—	—	—	—	—	—	84	84	72	75	87	90	72
72	77	85	84	80	77	73	76	82	81	79	79	72
64	75	71	83	84	78	82	83	83	88	82	90	71
69	72	76	85	80	82	84	91	82	82	81	79	75
73	77	88	89	88	89	60	53	57	62	64	66	75
61	69	69	73	71	74	72	67	68	79	82	85	66
67	73	75	83	86	81	—	—	—	—	—	—	79
—	—	—	—	—	—	92	92	92	93	92	92	79
49	52	55	63	64	67	68	76	74	77	84	84	70
79	77	82	86	86	83	83	81	88	88	88	88	77
78	80	78	88	91	91	91	89	91	90	89	94	80
85	90	89	89	90	96	97	97	96	95	97	96	90
58	75	78	87	83	81	85	87	89	86	79	81	77
71	72	69	77	79	81	—	—	—	—	—	—	76
—	—	—	—	—	—	84	86	84	78	78	72	62
64	67	74	71	79	84	85	78	69	64	63	60	49
40	45	41	43	44	40	54	57	58	66	66	61	47
40	55	53	48	54	63	48	49	48	47	47	47	52
71	50	53	56	55	54	54	55	56	55	55	74	69
66	67	71	74	78	76	83	77	75	81	85	89	80
68	74	77	84	86	89	—	—	—	—	—	—	82
—	—	—	—	—	—	91	92	94	95	93	95	82
68	78	83	85	87	86	85	79	85	88	92	90	73
64	63	78	73	73	75	82	85	86	87	90	87	73
—	—	—	—	—	—	—	—	—	—	—	—	—
68	72	74	78	79	80	80	79	80	81	81	82	74

In.	In.	In.
*579	*600	*626
*599	*469	*180
*485	*491	*322
*430	*412	*490
*452	*143	*418
*279	*277	*202
—	—	—
*375	*403	*412
*433	*438	*373
*562	*513	*521
*475	*465	*420
*459	*433	*410
*310	*321	*314
*424	*379	*356
—	—	—
*520	*585	*455
*481	*516	*510
*606	*621	*588
*625	*785	*731
*475	*425	*483
*353	*355	*336
—	—	—
*266	*88	*290
*332	*6	*284
*415	*254	*331
*534	*529	*537
*486	*375	*333
*469	*507	*439
—	—	—
*619	*623	*612
*557	*565	*579
—	—	—
*465	*470	*462

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*570	*516	*534	*499	*515	*516	*498	*483	*477	*491	*463	*490	*532
*437	*398	*349	*368	*368	*353	*319	*338	*356	*329	*320	*324	*443
*390	*451	*411	*473	*483	*473	*461	*461	*456	*450	*450	*470	*464
*390	*501	*465	*465	*485	*476	*460	*415	*400	*385	*368	*353	*476
*419	*395	*326	*289	*268	*257	*241	*238	*239	*235	*230	*223	*332
*224	*242	*254	*210	*235	*230	—	—	—	—	—	—	*261
—	—	—	—	—	—	*316	*310	*218	*251	*253	*245	—
*421	*389	*339	*300	*278	*258	*242	*237	*210	*229	*224	*232	*321
*427	*409	*309	*320	*296	*281	*282	*268	*268	*270	*255	*279	*344
*475	*465	*420	*423	*402	*387	*381	*380	*354	*360	*337	*340	*331
*459	*433	*410	*381	*342	*372	*258	*216	*224	*228	*231	*229	*391
*322	*324	*291	*279	*273	*280	*278	*312	*324	*346	*343	*350	*302
*262	*376	*372	*367	*359	*328	—	—	—	—	—	—	*400
—	—	—	—	—	—	*409	*422	*420	*421	*422	*411	—
*434	*405	*392	*417	*392	*398	*395	*429	*419	*429	*433	*390	*476
*530	*447	*435	*430	*402	*387	*387	*360	*361	*323	*317	*321	*424
*601	*543	*499	*476	*465	*453	*468	*456	*438	*452	*456	*475	*505
*763	*751	*609	*600	*589	*591	*575	*553	*529	*535	*549	*545	*623
*513	*521	*532	*537	*514	*489	*467	*447	*443	*425	*399	*394	*536
*341	*330	*319	*325	*328	*320	—	—	—	—	—	—	*340
—	—	—	—	—	—	*294	*301	*294	*273	*273	*280	—
*357	*361	*362	*351	*366	*360	*330	*320	*290	*269	*266	*256	*309
*330	*330	*267	*261	*251	*217	*287	*292	*293	*307	*304	*293	*306
*353	*440	*353	*308	*320	*344	*288	*292	*277	*272	*264	*272	*323
*592	*410	*393	*393	*355	*344	*334	*332	*330	*330	*330	*414	*399
*511	*706	*508	*515	*512	*503	*512	*480	*453	*468	*461	*440	*481
*473	*470	*473	*498	*495	*506	—	—	—	—	—	—	*510
—	—	—	—	—	—	*540	*541	*539	*528	*546	*365	—
*585	*605	*574	*547	*529	*530	*532	*526	*533	*512	*518	*523	*575
*619	*554	*600	*549	*524	*525	*509	*503	*489	*489	*512	*542	*567
—	—	—	—	—	—	—	—	—	—	—	—	—
*465	*446	*416	*408	*398	*391	*389	*382	*374	*370	*366	*373	*426

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JULY.	1	81	74	75	68	71	66	72	74	71	74	85
	2	82	76	71	72	70	59	69	64	69	73	67
	3	93	83	74	67	65	54	57	54	62	54	58
	4	82	80	80	76	75	71	72	73	66	71	65
	5	—	—	—	—	—	—	—	—	—	—	—
	6	85	83	67	74	88	58	57	39	38	39	39
	7	84	75	63	62	47	42	38	56	61	30	33
	8	67	76	92	90	88	78	74	70	64	63	63
	9	87	75	64	68	68	83	80	90	80	80	69
	10	81	74	73	71	57	51	56	78	67	63	57
	11	88	87	87	81	66	68	57	57	72	81	81
	12	—	—	—	—	—	—	—	—	—	—	—
	13	91	91	81	76	63	56	54	74	59	61	71
	14	87	91	92	61	67	61	56	59	61	65	55
	15	89	76	73	69	63	62	60	63	75	69	79
	16	86	87	82	90	61	63	57	51	46	50	46
	17	87	73	66	59	58	60	55	57	50	52	50
	18	89	80	76	72	69	67	63	57	58	55	55
	19	—	—	—	—	—	—	—	—	—	—	—
	20	80	81	81	77	70	68	64	60	65	61	60
	21	91	85	80	66	67	63	61	61	60	63	61
	22	91	89	89	81	82	78	70	65	67	68	70
	23	91	84	71	59	61	69	65	64	52	54	49
	24	93	90	91	91	92	91	95	91	87	79	88
	25	78	73	69	58	53	49	45	48	59	60	58
	26	—	—	—	—	—	—	—	—	—	—	—
	27	89	83	77	73	70	68	55	51	48	49	49
	28	82	83	77	70	67	65	68	69	70	67	54
	29	95	87	81	80	76	77	72	71	77	71	68
	30	94	92	87	85	79	76	81	82	63	59	64
	31	83	79	77	70	60	57	56	48	48	46	47
Hourly Means	86	82	78	73	69	65	63	61	63	61	60	61
Tension of the Vapour. JULY.	1	In. .559	In. .582	In. .636	In. .595	In. .630	In. .601	In. .673	In. .639	In. .639	In. .603	In. .620
	2	.495	.491	.476	.486	.503	.461	.591	.567	.582	.601	.561
	3	.501	.518	.524	.510	.500	.427	.472	.442	.510	.446	.427
	4	.390	.511	.589	.585	.626	.639	.668	.631	.625	.603	.610
	5	—	—	—	—	—	—	—	—	—	—	—
	6	.488	.514	.470	.502	.513	.528	.535	.386	.395	.390	.389
	7	.433	.433	.388	.492	.430	.327	.306	.450	.485	.269	.291
	8	.367	.431	.503	.536	.580	.545	.574	.590	.589	.607	.629
	9	.486	.528	.567	.652	.625	.665	.562	.583	.626	.653	.651
	10	.726	.748	.819	.848	.775	.738	.880	.708	.833	.872	.869
	11	.621	.751	.775	.781	.773	.776	.695	.697	.730	.693	.716
	12	—	—	—	—	—	—	—	—	—	—	—
	13	.422	.472	.457	.501	.446	.423	.442	.638	.495	.551	.612
	14	.332	.410	.442	.333	.364	.341	.336	.345	.366	.378	.312
	15	.317	.315	.321	.332	.295	.310	.323	.316	.416	.365	.470
	16	.352	.338	.438	.517	.369	.360	.350	.323	.319	.334	.319
	17	.305	.355	.410	.385	.411	.438	.405	.418	.395	.369	.351
	18	.391	.456	.485	.496	.495	.510	.487	.465	.477	.453	.465
	19	—	—	—	—	—	—	—	—	—	—	—
	20	.594	.567	.569	.599	.600	.584	.556	.545	.597	.579	.568
	21	.553	.587	.608	.559	.580	.558	.569	.544	.527	.537	.501
	22	.539	.552	.561	.580	.572	.567	.585	.564	.544	.535	.559
	23	.473	.529	.489	.482	.570	.600	.611	.610	.524	.512	.492
	24	.598	.576	.561	.578	.570	.573	.585	.555	.574	.588	.606
	25	.459	.486	.513	.490	.470	.458	.430	.461	.596	.576	.562
	26	—	—	—	—	—	—	—	—	—	—	—
	27	.568	.558	.571	.561	.557	.523	.441	.409	.399	.415	.416
	28	.458	.513	.544	.553	.577	.539	.557	.569	.595	.585	.559
	29	.662	.712	.673	.727	.729	.738	.783	.734	.719	.740	.736
	30	.730	.781	.809	.818	.792	.756	.787	.674	.722	.685	.667
	31	.501	.490	.497	.490	.460	.446	.476	.418	.429	.417	.436
Hourly Means	.488	.531	.515	.555	.550	.536	.544	.530	.545	.533	.533	.519



HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
71	74	85
73	65	67
54	54	58
71	65	67
—	—	—
39	39	40
30	33	29
63	63	67
80	69	66
63	57	50
81	81	75
—	—	—
61	71	61
65	55	58
69	79	69
50	46	47
52	50	57
55	55	56
—	—	—
61	60	62
63	61	64
68	70	73
54	49	50
79	88	81
60	58	61
—	—	—
49	49	46
67	51	72
71	68	65
59	64	62
46	47	56
—	—	—
61	60	61
In.	In.	In.
603	620	639
601	561	561
446	427	472
603	610	586
—	—	—
390	389	403
269	291	256
607	629	603
653	651	655
872	809	583
693	716	733
—	—	—
551	612	508
378	312	307
365	470	380
334	319	333
369	351	382
453	465	467
—	—	—
579	568	556
537	504	498
583	559	567
512	521	492
588	606	590
576	562	577
—	—	—
415	416	382
585	559	618
740	736	684
385	667	658
417	436	509
—	—	—
533	533	519

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
84	86	92	93	94	85	95	90	88	87	88	86	81
71	76	84	91	89	93	93	92	92	92	96	95	79
87	75	83	87	86	84	86	85	81	79	79	81	74
74	85	82	82	82	76	—	—	—	—	—	—	79
—	—	—	—	—	—	96	92	91	90	98	86	86
36	43	50	59	64	70	76	79	81	84	87	97	64
29	35	52	55	55	60	72	58	61	61	72	79	55
73	74	69	80	71	73	79	85	80	91	93	92	77
69	78	79	90	90	89	90	89	94	89	92	76	81
63	64	80	85	91	89	94	93	84	87	89	90	74
83	87	87	85	85	87	—	—	—	—	—	—	82
—	—	—	—	—	—	90	88	93	98	87	96	86
74	82	88	89	88	92	92	75	85	88	87	90	78
60	65	69	76	73	75	78	85	87	87	89	85	73
66	65	81	87	83	83	82	78	83	85	86	88	75
56	59	70	82	79	79	86	84	85	85	84	90	71
59	66	71	75	73	76	75	77	78	84	86	89	68
65	77	87	87	89	88	—	—	—	—	—	—	73
—	—	—	—	—	—	69	74	76	79	87	82	79
72	81	83	87	91	92	92	94	91	91	93	96	79
65	80	75	81	84	86	89	89	92	95	94	94	77
73	78	87	90	92	86	88	91	92	92	96	91	83
37	71	79	81	85	86	81	84	87	82	87	87	73
80	87	84	86	80	84	88	89	88	90	91	85	88
61	63	63	59	60	60	—	—	—	—	—	—	68
—	—	—	—	—	—	87	92	92	93	91	92	69
51	59	75	79	77	76	79	79	85	82	82	78	69
74	84	92	94	94	94	95	95	96	93	98	94	81
79	86	86	93	91	98	96	96	97	96	97	97	85
65	67	70	71	72	69	81	83	82	79	82	83	76
63	65	69	75	68	67	65	67	77	79	82	84	66
—	—	—	—	—	—	—	—	—	—	—	—	—
66	72	77	81	81	81	85	85	86	87	88	88	75
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
598	597	588	573	552	522	535	570	550	529	517	498	585
590	557	510	474	445	430	444	461	463	446	449	446	501
516	516	435	413	386	368	361	359	357	346	346	351	438
603	597	566	518	524	485	—	—	—	—	—	—	563
—	—	—	—	—	—	568	515	542	524	504	475	563
333	338	362	386	382	393	395	397	399	372	394	408	426
245	270	317	323	315	290	315	298	305	308	322	373	310
626	653	545	492	469	459	473	492	478	455	449	439	524
678	692	611	636	617	674	683	619	670	618	639	633	630
602	567	623	600	616	618	619	595	562	572	573	562	689
697	663	709	677	697	687	—	—	—	—	—	—	616
—	—	—	—	—	—	489	466	443	426	372	422	448
598	524	478	468	465	462	423	287	293	275	267	279	448
502	303	291	295	265	279	283	287	289	270	275	273	320
384	355	384	395	350	340	340	323	331	318	304	307	347
363	325	313	312	287	276	285	280	275	270	267	265	332
376	389	357	321	325	329	323	313	309	314	312	327	359
475	499	457	422	416	395	—	—	—	—	—	—	456
—	—	—	—	—	—	426	429	420	433	482	452	456
585	583	544	484	468	470	493	475	452	430	462	462	530
490	530	516	521	517	512	540	501	483	492	497	489	530
555	532	482	479	458	422	425	432	409	395	423	433	509
523	562	518	539	513	534	510	529	518	518	550	552	536
576	592	572	559	496	480	486	491	486	493	496	465	548
584	559	483	424	393	394	—	—	—	—	—	—	492
—	—	—	—	—	—	499	513	495	464	459	456	492
327	386	393	377	354	346	363	373	397	390	410	418	432
615	620	607	561	535	506	517	549	582	577	593	586	565
701	727	723	746	743	737	724	712	697	685	686	662	717
618	607	560	558	505	469	537	539	518	487	497	501	636
521	478	437	424	365	357	339	371	390	392	408	415	436
—	—	—	—	—	—	—	—	—	—	—	—	—
523	519	498	480	464	453	461	454	451	438	442	443	501

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. AUGUST.	1	79	67	55	49	49	56	58	61	56	55	53	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	89	87	81	75	71	70	67	68	59	52	46	
	4	74	71	75	66	72	62	60	61	60	60	61	61
	5	91	79	76	78	71	69	68	64	63	61	60	60
	6	84	73	64	59	67	63	61	58	60	56	60	53
	7	74	71	70	70	83	64	61	60	64	59	57	62
	8	82	78	71	87	87	88	83	78	76	74	80	84
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	87	86	82	75	67	69	64	59	58	56	56	53
	11	70	60	56	62	60	62	66	63	64	61	61	61
	12	96	90	83	76	77	72	64	61	59	58	59	54
	13	89	90	85	80	76	75	68	62	89	78	75	75
	14	75	74	63	53	67	67	68	67	60	64	61	65
	15	88	82	80	77	72	71	64	60	65	57	57	62
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	88	85	77	75	67	83	60	60	58	51	50	56
	18	80	73	66	67	70	71	69	68	69	70	68	65
	19	91	72	69	59	59	57	60	61	60	66	71	75
	20	92	94	95	95	96	94	93	82	88	82	92	91
	21	93	95	89	87	82	80	83	82	83	77	71	71
	22	87	86	85	82	89	78	81	85	79	80	83	81
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	60	56	58	60	60	66	69	71	63	64	60	64
	25	83	80	78	74	72	72	75	72	66	67	68	69
	26	92	97	84	74	73	73	71	65	62	59	53	59
	27	91	88	82	81	79	80	76	77	75	71	70	70
	28	90	89	79	79	82	81	81	81	74	79	80	89
	29	96	92	88	85	79	78	80	89	88	89	86	87
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	90	88	87	85	78	79	74	71	65	65	67	93
Hourly Means	85	81	76	74	73	72	70	69	68	66	66	68	
Tension of the Vapour. AUGUST.	1	In. '441	In. '433	In. '396	In. '387	In. '407	In. '470	In. '507	In. '531	In. '495	In. '496	In. '468	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	'449	'537	'588	'601	'603	'625	'628	'688	'613	'534	'485	'493
	4	'455	'608	'608	'599	'675	'656	'678	'697	'693	'689	'713	'731
	5	'638	'631	'680	'773	'756	'769	'764	'774	'768	'738	'709	'709
	6	'478	'482	'495	'552	'701	'676	'559	'637	'624	'598	'597	'566
	7	'457	'489	'528	'565	'748	'636	'632	'642	'676	'613	'569	'609
	8	'518	'512	'502	'555	'550	'593	'654	'627	'618	'603	'641	'626
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	'556	'554	'557	'512	'539	'579	'530	'512	'521	'531	'513	'459
	11	'306	'311	'339	'413	'432	'445	'507	'488	'495	'490	'474	'474
	12	'416	'494	'560	'609	'683	'617	'690	'603	'591	'605	'584	'523
	13	'613	'670	'689	'688	'743	'747	'691	'711	'703	'703	'717	'735
	14	'442	'467	'479	'454	'603	'610	'620	'581	'546	'589	'596	'587
	15	'445	'516	'569	'634	'660	'665	'622	'593	'662	'616	'616	'631
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	'461	'484	'488	'506	'495	'466	'453	'431	'417	'390	'381	'364
	18	'288	'291	'286	'331	'386	'406	'393	'395	'401	'427	'410	'397
	19	'380	'391	'387	'346	'348	'367	'376	'388	'412	'416	'435	'442
	20	'392	'510	'521	'530	'548	'557	'568	'537	'578	'539	'614	'616
	21	'426	'526	'590	'637	'607	'607	'637	'621	'637	'631	'564	'553
	22	'512	'517	'515	'518	'562	'538	'624	'616	'625	'600	'592	'542
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	'273	'286	'323	'378	'398	'434	'449	'460	'426	'442	'417	'453
	25	'364	'423	'486	'508	'511	'526	'526	'520	'511	'534	'524	'511
	26	'409	'562	'587	'576	'552	'552	'590	'543	'514	'459	'435	'448
	27	'459	'537	'572	'634	'655	'668	'614	'626	'618	'579	'562	'543
	28	'495	'525	'520	'539	'646	'649	'690	'705	'670	'680	'649	'663
	29	'506	'570	'652	'683	'665	'698	'703	'705	'551	'566	'566	'590
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	'548	'555	'675	'695	'679	'715	'711	'708	'656	'663	'670	'694
Hourly Means	'455	'492	'523	'549	'583	'589	'591	'590	'579	'567	'558	'555	

9	10	11
3	4	5
55	53	52
52	46	51
60	61	63
61	60	60
56	60	53
59	57	62
74	80	84
56	56	53
61	61	61
58	59	54
78	75	75
64	61	65
57	57	62
51	50	50
70	68	65
66	71	75
82	92	91
77	71	71
80	83	81
64	60	64
67	68	69
59	53	59
71	70	70
79	80	89
89	86	87
65	67	93
66	66	68
In.	In.	In.
.496	.468	.452
.534	.485	.493
.639	.713	.731
.738	.709	.709
.598	.597	.566
.613	.569	.609
.603	.641	.626
.531	.513	.459
.490	.474	.474
.605	.584	.523
.703	.717	.735
.589	.596	.587
.616	.616	.631
.390	.384	.364
.427	.440	.397
.416	.435	.442
.539	.614	.616
.631	.564	.553
.600	.592	.542
.442	.417	.453
.534	.524	.511
.459	.435	.448
.579	.562	.543
.680	.619	.663
.566	.566	.590
.663	.670	.694
.567	.558	.555

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23	17	
6	7	8	9	10	11	12	13	14	15	16	17		
57	63	66	63	64	69	—	—	—	—	—	—	—	68
48	63	61	68	75	78	91	89	93	91	91	92	92	70
71	74	83	81	85	90	89	88	87	90	93	93	93	75
55	54	59	65	62	64	75	75	64	73	79	80	80	69
57	41	60	70	74	78	76	68	66	69	77	73	73	65
67	70	75	80	83	72	80	78	79	80	83	78	78	72
90	88	93	93	93	92	—	—	—	—	—	—	—	85
49	52	55	57	60	67	89	92	96	86	86	85	85	65
69	76	88	91	91	93	91	92	93	96	93	90	90	75
62	67	65	68	72	74	80	74	80	84	86	90	90	73
81	57	66	69	67	67	71	75	70	67	70	69	69	74
64	74	80	85	84	83	84	87	87	87	87	86	86	74
72	77	77	76	86	86	—	—	—	—	—	—	—	77
51	64	67	72	73	76	76	96	88	89	88	87	87	71
71	81	91	85	87	90	90	90	89	88	89	86	86	78
79	83	84	89	89	89	89	89	70	94	91	90	90	77
91	93	95	97	96	97	96	96	96	94	95	96	96	93
83	86	91	90	90	94	92	95	95	95	89	89	89	87
85	88	91	90	92	93	—	—	—	—	—	—	—	82
69	81	91	88	87	88	74	83	82	76	66	60	60	74
75	85	87	90	88	91	88	89	81	81	85	85	85	81
60	83	87	81	81	85	86	81	83	88	87	89	89	78
79	80	81	83	80	81	77	75	76	88	89	90	90	80
84	90	91	93	93	93	94	95	96	96	96	94	94	87
85	91	92	96	95	96	—	—	—	—	—	—	—	89
77	81	80	85	83	85	91	93	94	90	92	92	92	83
70	75	79	81	82	84	84	85	84	85	86	85	85	75
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
.467	.443	.407	.390	.392	.404	—	—	—	—	—	—	—	.438
.436	.497	.470	.473	.448	.424	.444	.420	.422	.412	.420	.410	.410	.497
.741	.676	.703	.618	.648	.616	.605	.602	.570	.560	.585	.568	.568	.635
.648	.616	.629	.650	.626	.631	.606	.535	.472	.467	.464	.466	.466	.617
.583	.397	.462	.452	.437	.443	.440	.417	.411	.413	.419	.426	.426	.512
.603	.548	.530	.517	.526	.462	.500	.504	.508	.507	.508	.499	.499	.559
.616	.593	.614	.615	.619	.603	—	—	—	—	—	—	—	.580
.392	.347	.326	.345	.329	.351	.313	.301	.301	.295	.284	.285	.285	.428
.509	.491	.473	.457	.448	.457	.421	.405	.391	.399	.397	.369	.369	.433
.551	.544	.505	.508	.512	.514	.541	.533	.535	.562	.568	.563	.563	.556
.725	.590	.524	.531	.466	.468	.476	.460	.451	.397	.397	.386	.386	.590
.575	.570	.548	.496	.480	.464	.455	.464	.450	.439	.442	.430	.430	.516
.644	.636	.620	.603	.644	.629	—	—	—	—	—	—	—	.577
.356	.386	.365	.365	.363	.361	.494	.483	.474	.475	.474	.446	.446	.394
.396	.375	.384	.344	.348	.347	.359	.328	.310	.304	.300	.298	.298	.356
.464	.466	.467	.449	.481	.493	.489	.492	.497	.501	.490	.483	.483	.438
.603	.565	.547	.545	.523	.524	.515	.495	.484	.454	.449	.442	.442	.532
.589	.577	.574	.563	.578	.560	.556	.543	.528	.528	.512	.525	.525	.570
.547	.530	.528	.519	.509	.501	—	—	—	—	—	—	—	.502
.443	.411	.398	.364	.362	.360	.405	.398	.388	.361	.344	.280	.280	.378
.516	.530	.516	.504	.503	.499	.353	.340	.316	.316	.322	.336	.336	.491
.427	.473	.468	.432	.438	.441	.443	.419	.408	.425	.412	.420	.420	.476
.559	.495	.486	.458	.446	.445	.449	.427	.431	.474	.472	.479	.479	.530
.620	.609	.595	.568	.553	.557	.535	.519	.506	.490	.488	.471	.471	.581
.593	.557	.547	.540	.519	.510	—	—	—	—	—	—	—	.574
.641	.624	.595	.596	.575	.532	.547	.491	.479	.479	.495	.543	.543	.612
.548	.518	.511	.499	.490	.486	.525	.527	.527	.495	.544	.545	.545	.515

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. SEPTEMBER.	1	93	92	82	79	78	57	52	58	60	62	74
	2	94	93	92	86	81	79	81	74	74	75	76
	3	95	94	87	92	89	88	89	94	97	97	94
	4	94	93	86	88	89	89	87	87	81	83	84
	5	98	95	94	89	84	88	88	84	85	88	86
	6	—	—	—	—	—	—	—	—	—	—	—
	7	96	97	92	85	85	83	82	75	72	71	72
	8	84	81	78	73	71	70	68	70	79	62	57
	9	59	56	59	58	60	58	50	55	51	49	47
	10	59	62	65	52	51	47	44	47	53	54	56
	11	90	90	81	80	80	80	78	75	72	77	83
	12	95	93	87	81	82	77	86	84	86	78	78
	13	—	—	—	—	—	—	—	—	—	—	—
	14	97	97	93	87	80	76	78	77	78	82	88
	15	72	65	59	57	52	43	47	39	35	35	38
	16	85	81	69	63	66	65	65	62	62	63	65
	17	88	83	83	84	84	75	80	79	77	86	88
	18	86	84	83	76	68	69	71	71	73	75	73
	19	91	88	88	76	77	76	74	67	71	72	69
	20	—	—	—	—	—	—	—	—	—	—	—
	21	64	78	78	76	67	63	62	62	58	59	55
	22	88	89	80	79	81	79	75	76	73	72	74
	23	92	95	94	84	82	78	79	73	73	73	75
	24	93	92	87	91	95	95	94	91	90	85	85
	25	91	90	89	95	94	94	94	92	94	95	93
	26	91	89	85	86	84	79	71	73	75	77	69
	27	—	—	—	—	—	—	—	—	—	—	—
	28	89	88	86	79	72	82	75	74	75	71	71
	29	87	82	83	81	78	74	66	71	67	68	78
	30	88	86	79	76	69	72	72	75	75	76	79
Hourly Means	87	86	82	79	77	74	73	73	73	72	73	
Tension of the Vapour. SEPTEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	.558	.626	.624	.715	.749	.593	.588	.613	.668	.639	.645
	2	.575	.647	.698	.735	.752	.772	.815	.781	.763	.747	.743
	3	.656	.685	.669	.680	.706	.725	.747	.724	.728	.746	.743
	4	.606	.647	.657	.681	.703	.773	.762	.763	.760	.755	.749
	5	.700	.729	.772	.801	.809	.786	.768	.765	.760	.788	.772
	6	—	—	—	—	—	—	—	—	—	—	—
	7	.587	.684	.766	.799	.845	.850	.889	.820	.790	.768	.752
	8	.435	.449	.463	.467	.485	.494	.485	.488	.518	.421	.386
	9	.225	.233	.260	.270	.293	.291	.261	.306	.297	.292	.285
	10	.317	.334	.351	.299	.302	.294	.275	.295	.339	.353	.372
	11	.538	.582	.568	.615	.626	.646	.648	.687	.694	.672	.677
	12	.636	.713	.763	.768	.773	.749	.718	.532	.588	.590	.600
	13	—	—	—	—	—	—	—	—	—	—	—
	14	.598	.667	.727	.733	.754	.786	.781	.799	.827	.801	.787
	15	.307	.287	.263	.256	.252	.217	.251	.216	.269	.214	.237
	16	.253	.295	.327	.333	.380	.390	.389	.377	.382	.372	.374
	17	.361	.355	.380	.395	.416	.414	.456	.445	.421	.434	.420
	18	.392	.394	.403	.425	.423	.444	.447	.451	.467	.476	.478
	19	.292	.342	.431	.440	.518	.543	.559	.512	.511	.530	.522
	20	—	—	—	—	—	—	—	—	—	—	—
	21	.234	.296	.293	.297	.277	.277	.289	.304	.294	.299	.286
	22	.215	.250	.307	.369	.391	.410	.412	.422	.424	.422	.434
	23	.278	.381	.475	.492	.518	.543	.583	.562	.572	.567	.561
	24	.464	.522	.512	.546	.555	.560	.575	.565	.476	.457	.461
	25	.320	.325	.326	.345	.375	.395	.401	.403	.420	.427	.398
	26	.254	.276	.294	.339	.358	.352	.349	.373	.375	.388	.369
	27	—	—	—	—	—	—	—	—	—	—	—
	28	.210	.234	.253	.261	.268	.345	.325	.323	.350	.351	.346
	29	.387	.395	.419	.451	.465	.467	.434	.458	.437	.424	.449
30	.410	.435	.424	.462	.445	.484	.497	.506	.489	.494	.483	
Hourly Means	.416	.453	.478	.500	.516	.523	.526	.520	.524	.516	.512	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
60	62	73	80	83	81	85	89	81	89	93	94	91	92	93	79
75	76	81	83	81	93	92	85	85	89	91	89	90	91	92	85
97	94	97	97	97	95	96	92	95	96	95	96	97	96	93	94
83	84	85	89	91	92	92	93	95	96	97	97	96	96	97	91
88	86	89	82	79	86	93	94	94	—	—	—	—	—	—	90
71	72	72	78	83	69	89	85	82	94	96	96	95	97	96	81
62	57	59	60	70	72	70	56	55	78	72	76	78	83	83	81
49	47	50	48	51	54	60	59	69	48	48	47	51	52	54	64
54	56	69	61	71	78	—	89	92	71	70	70	67	68	62	58
77	83	83	61	81	54	—	89	92	92	92	97	91	89	90	66
78	78	81	85	89	91	93	94	94	94	96	92	97	97	97	87
—	—	—	86	91	90	88	94	95	—	—	—	—	—	—	89
82	88	85	82	85	85	84	79	76	94	95	97	97	95	96	81
35	38	32	78	85	85	84	79	76	80	80	75	71	68	73	81
63	65	66	66	66	60	61	63	64	72	69	71	76	77	83	58
86	88	66	66	65	76	81	81	77	83	80	83	85	86	87	73
75	73	79	80	86	87	88	89	89	87	86	87	87	86	88	85
72	69	71	81	86	91	93	89	89	93	90	92	90	91	89	81
—	—	—	81	79	78	79	81	87	—	—	—	—	—	—	80
59	55	51	81	85	87	86	81	81	88	90	89	88	83	82	75
72	73	76	81	89	90	91	90	92	87	87	88	88	83	83	84
73	75	80	84	89	92	89	93	95	91	91	90	90	92	95	87
85	85	85	87	86	87	91	91	93	91	90	90	91	90	91	90
95	93	93	89	89	90	85	86	88	88	85	84	88	81	89	90
77	69	77	81	85	85	85	89	—	—	—	—	—	—	—	84
—	—	—	80	87	87	79	79	75	91	91	95	90	93	93	79
71	71	72	81	80	87	76	88	87	77	77	75	75	83	87	80
68	78	84	82	82	76	88	88	82	96	87	87	87	87	86	80
76	79	82	85	94	79	77	77	73	75	75	85	86	81	83	80
72	73	76	79	82	82	85	82	84	86	85	86	86	87	87	81
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'639	'615	'695	'688	'659	'660	'659	'633	'618	'627	'621	'597	'590	'574	'577	'635
'717	'713	'711	'742	'721	'737	'718	'668	'661	'674	'672	'649	'611	'657	'610	'706
'716	'713	'720	'730	'714	'660	'616	'617	'657	'662	'682	'687	'682	'670	'606	'688
'755	'719	'745	'723	'708	'701	'701	'695	'697	'712	'726	'726	'724	'712	'692	'713
'788	'772	'711	'668	'608	'601	'585	'568	'570	—	—	—	—	—	—	'685
'768	'752	'737	'725	'722	'617	'671	'629	'597	'525	'416	'416	'440	'450	'452	'667
'121	'386	'378	'365	'368	'374	'319	'269	'217	'228	'212	'203	'214	'207	'212	'364
'292	'285	'300	'277	'285	'301	'330	'321	'372	'379	'327	'372	'351	'312	'310	'322
'353	'372	'397	'391	'437	'151	—	'117	'153	'145	'457	'489	'491	'506	'422	'388
'672	'677	'700	'678	'643	'633	'624	'592	'592	'576	'618	'593	'631	'613	'611	'627
'590	'600	'633	'606	'580	'538	'493	'503	'522	—	—	—	—	—	—	'616
'801	'787	'808	'755	'775	'770	'717	'668	'586	'575	'576	'583	'583	'578	'575	'616
'213	'297	'251	'252	'289	'264	'257	'255	'262	'278	'262	'267	'258	'250	'264	'255
'372	'374	'380	'381	'382	'404	'407	'383	'317	'338	'322	'335	'341	'312	'358	'359
'431	'420	'415	'409	'398	'407	'407	'407	'405	'396	'395	'399	'399	'392	'407	'406
'476	'478	'488	'456	'406	'388	'337	'301	'375	'366	'351	'337	'301	'301	'287	'398
'530	'522	'511	'534	'473	'467	'437	'423	'408	—	—	—	—	—	—	'459
'299	'286	'267	'347	'318	'299	'292	'271	'261	'262	'253	'215	'210	'212	'239	'278
'422	'434	'432	'430	'378	'357	'331	'320	'303	'303	'297	'290	'278	'276	'282	'347
'567	'561	'553	'536	'558	'556	'540	'544	'515	'527	'510	'534	'491	'479	'472	'516
'157	'461	'447	'447	'430	'413	'406	'389	'378	'366	'351	'346	'341	'328	'324	'444
'427	'398	'367	'345	'333	'342	'322	'322	'333	'322	'315	'313	'288	'268	'260	'344
'388	'369	'380	'384	'366	'370	'336	'325	'296	—	—	—	—	—	—	'318
'351	'316	'336	'365	'347	'335	'329	'308	'302	'307	'255	'255	'229	'226	'218	'313
'424	'449	'473	'455	'407	'349	'371	'367	'398	'407	'418	'400	'401	'400	'403	'418
'491	'483	'455	'503	'506	'495	'470	'469	'389	'345	'449	'357	'335	'314	'332	'433
'516	'512	'513	'508	'492	'481	'472	'450	'445	'445	'438	'432	'418	'414	'406	'475

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Readings Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. OCTOBER.	1	77	77	76	74	72	71	72	73	77	74	72	76
	2	89	90	91	89	86	83	79	79	70	63	68	69
	3	88	86	81	78	77	80	80	79	75	73	71	73
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	95	95	96	88	85	83	76	76	75	71	59	69
	6	61	88	89	89	87	85	87	81	82	77	74	75
	7	91	94	91	84	78	76	76	75	77	79	80	82
	8	95	91	92	89	92	90	90	94	92	93	92	92
	9	97	97	96	93	80	81	88	84	76	80	79	83
	10	87	74	68	71	75	77	86	81	80	79	84	90
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	84	80	77	76	72	72	72	72	73	70	77	81
	13	89	89	88	89	90	89	85	87	89	95	95	96
	14	95	95	96	82	88	81	72	67	63	64	67	82
	15	93	86	88	72	65	61	60	56	58	55	62	67
	16	87	88	81	82	89	86	88	86	88	94	91	95
	17	89	92	83	89	90	89	89	87	78	79	73	72
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	96	94	79	66	54	62	59	61	59	58	62	69
	20	91	97	85	89	83	79	77	80	82	79	80	75
	21	87	87	85	78	73	71	68	68	70	76	78	80
	22	87	87	88	93	86	80	80	67	72	78	81	91
	23	92	86	82	85	81	97	95	93	84	86	75	70
	24	92	94	89	85	83	65	62	62	57	57	56	46
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	89	95	91	90	91	89	79	76	75	78	80	80
	27	93	88	85	83	79	78	67	50	68	72	73	74
	28	85	88	82	78	73	72	63	68	63	66	68	81
	29	86	84	84	81	75	74	71	61	57	58	56	67
	30	78	78	78	76	67	60	57	58	61	63	60	64
	31	70	81	72	76	76	80	80	84	90	92	80	91
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	88	88	85	82	80	78	76	74	74	75	74	77	
Tension of the Vapour. OCTOBER.	1	In. .302	In. .281	In. .283	In. .272	In. .270	In. .276	In. .285	In. .290	In. .311	In. .307	In. .284	In. .289
	2	.283	.281	.281	.281	.285	.291	.283	.296	.266	.261	.281	.283
	3	.213	.221	.266	.297	.301	.322	.327	.328	.326	.310	.289	.272
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	.280	.290	.336	.354	.397	.422	.420	.420	.412	.407	.365	.385
	6	.188	.238	.301	.394	.419	.435	.458	.457	.459	.446	.414	.412
	7	.332	.366	.459	.484	.483	.488	.510	.520	.497	.525	.519	.496
	8	.486	.471	.506	.498	.527	.532	.479	.469	.451	.447	.440	.430
	9	.438	.449	.452	.577	.563	.562	.573	.549	.369	.357	.332	.333
	10	.195	.178	.174	.188	.208	.233	.256	.260	.259	.264	.270	.273
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	.308	.333	.347	.371	.367	.379	.387	.387	.394	.388	.410	.413
	13	.306	.301	.298	.306	.303	.290	.278	.282	.287	.297	.287	.264
	14	.197	.192	.230	.232	.290	.282	.263	.249	.238	.237	.249	.258
	15	.203	.193	.219	.206	.200	.200	.195	.186	.195	.196	.214	.203
	16	.278	.293	.296	.301	.353	.359	.384	.412	.410	.425	.408	.421
	17	.181	.202	.161	.177	.184	.185	.189	.189	.168	.171	.157	.151
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	.175	.166	.180	.182	.173	.201	.196	.188	.182	.184	.194	.197
	20	.241	.264	.246	.261	.248	.250	.256	.267	.249	.224	.228	.269
	21	.164	.167	.171	.182	.183	.186	.187	.193	.187	.191	.192	.193
	22	.196	.195	.199	.210	.195	.183	.176	.152	.161	.159	.155	.163
	23	.124	.126	.123	.138	.162	.208	.212	.227	.213	.215	.207	.190
	24	.176	.191	.205	.219	.232	.196	.192	.192	.167	.169	.161	.132
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	.169	.199	.217	.236	.262	.295	.295	.303	.298	.296	.295	.283
	27	.340	.309	.290	.272	.258	.273	.230	.193	.235	.225	.220	.213
	28	.140	.145	.148	.144	.146	.146	.135	.156	.156	.163	.163	.166
	29	.181	.180	.188	.212	.215	.228	.196	.190	.185	.185	.172	.190
	30	.158	.156	.160	.164	.152	.144	.138	.141	.147	.149	.141	.139
	31	.124	.153	.134	.139	.144	.157	.160	.175	.193	.203	.191	.215
Nov. 1	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	.236	.242	.254	.270	.279	.286	.284	.284	.275	.274	.268	.266	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

R.			HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
74	72	76	80	79	80	80	80	84	85	93	92	88	89	79	
66	68	69	71	82	79	87	93	88	91	88	91	91	91	90	83
73	71	73	—	79	88	78	81	83	—	—	—	—	—	—	83
—	—	—	—	—	—	—	—	—	94	93	93	90	92	93	83
71	59	69	83	82	71	75	83	79	85	93	93	95	93	88	83
77	74	75	87	76	87	94	93	92	91	86	90	89	90	91	85
79	80	82	91	87	86	88	89	74	94	94	92	94	94	95	86
93	92	83	81	92	93	94	95	95	95	97	96	97	97	96	93
80	79	82	81	81	81	75	83	87	84	89	90	88	91	73	85
79	81	90	92	98	92	93	92	95	—	—	—	—	—	—	85
—	—	—	—	—	—	—	—	—	94	84	85	85	91	87	85
70	77	81	78	87	90	91	94	96	96	96	91	87	88	90	83
95	95	96	97	91	90	80	83	84	86	85	88	88	87	87	89
64	67	82	89	92	86	87	90	93	91	85	83	87	88	95	84
55	62	67	78	77	78	73	74	75	74	82	83	90	84	88	74
94	91	95	90	86	87	85	79	84	86	85	80	81	81	87	86
79	73	72	80	82	80	79	86	81	—	—	—	—	—	—	85
—	—	—	—	—	—	—	—	—	87	92	90	93	90	87	85
58	62	69	74	75	75	76	78	74	82	86	90	92	88	91	75
79	80	75	77	85	85	87	87	93	87	87	87	89	94	91	86
76	78	80	81	79	85	84	73	79	81	81	81	83	82	84	79
78	81	91	78	79	87	89	94	95	92	94	96	95	93	90	86
86	75	70	72	75	73	81	87	90	89	78	92	93	94	96	85
57	56	46	69	73	75	79	85	90	—	—	—	—	—	—	78
—	—	—	—	—	—	—	—	—	95	96	94	94	94	88	84
78	80	80	79	79	74	77	84	85	81	88	88	87	90	90	84
72	73	74	75	75	80	78	76	79	88	92	83	77	78	81	78
96	68	81	88	91	87	95	95	96	95	87	72	92	89	85	82
58	56	67	73	74	73	79	75	73	70	72	75	74	77	74	73
63	60	64	64	69	70	72	72	73	74	79	76	75	72	70	69
92	80	91	—	93	96	94	96	97	—	—	—	—	—	—	87
—	—	—	—	—	—	—	—	—	87	90	—	89	—	92	—
75	74	77	81	82	83	83	85	86	87	88	87	89	88	88	82
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
295	291	278	265	259	262	266	261	276	272	275	277	270	275	277	280
297	253	242	230	231	230	234	220	220	220	210	210	210	210	216	256
258	248	261	234	235	230	—	—	—	284	258	249	237	239	246	269
353	313	301	303	287	256	268	255	241	237	234	236	234	236	236	322
417	374	400	375	318	385	378	354	333	316	322	322	316	322	322	373
188	535	534	539	535	481	520	479	456	480	480	482	482	482	482	487
421	424	424	412	411	444	445	439	442	449	443	440	443	440	440	458
306	296	292	250	226	224	215	227	224	213	212	171	171	171	171	350
228	220	209	210	210	205	—	—	—	—	—	—	—	—	—	—
309	137	379	359	359	361	358	357	350	327	331	335	331	335	335	369
273	252	248	226	232	225	223	218	211	210	204	200	225	200	225	259
236	239	250	248	254	258	256	243	228	233	213	215	212	212	212	212
294	198	197	188	193	205	205	226	228	264	265	283	211	211	211	211
394	367	350	304	242	248	251	224	199	199	187	185	185	185	185	312
166	162	150	144	144	142	—	—	—	—	—	—	—	—	—	—
205	200	200	201	202	202	202	185	190	182	190	181	174	174	174	172
206	204	198	188	180	180	169	167	161	162	162	162	162	162	162	202
191	180	173	177	167	171	174	174	176	183	188	191	181	181	181	181
137	134	141	138	131	120	114	115	112	110	115	118	118	118	118	151
191	192	174	188	199	193	193	169	195	193	190	180	180	180	180	183
169	169	166	156	159	159	—	—	—	—	—	—	—	—	—	—
313	312	301	303	323	326	322	331	331	321	337	341	341	341	341	292
297	201	206	189	184	183	190	191	166	155	158	144	144	144	144	218
156	145	138	156	167	169	157	157	150	155	166	165	165	165	165	154
188	180	174	185	172	163	152	151	156	154	157	153	153	153	153	179
138	141	144	147	144	140	139	139	132	133	126	124	124	124	124	143
222	227	242	232	236	239	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	280	291	291	299	299	311	311	311	215
261	255	251	243	239	237	249	244	240	240	240	239	236	236	236	256

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Greenwich Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. NOVEMBER.	2	94	92	95	92	93	97	93	93	95	94	96	
	3	95	93	94	91	89	80	79	77	79	76	82	
	4	91	90	92	82	71	67	62	60	57	54	57	
	5	92	89	82	81	76	70	69	72	70	69	75	
	6	95	91	64	88	88	79	74	66	68	68	57	
	7	86	81	82	84	80	82	78	77	73	76	70	
	8	—	—	—	—	—	—	—	—	—	—	—	
	9	96	96	96	96	96	94	93	92	92	94	91	
	10	93	95	93	94	88	85	80	81	82	90	85	
	11	90	92	93	93	92	90	91	93	93	90	90	
	12	82	79	82	82	82	79	77	78	77	80	79	
	13	86	81	84	85	84	87	89	87	84	84	84	
	14	90	89	91	89	84	84	80	85	77	70	72	
	15	—	—	—	—	—	—	—	—	—	—	—	
	16	93	91	95	93	93	90	89	85	86	88	90	
	17	92	91	89	89	83	87	85	78	82	85	86	
	18	93	94	95	92	81	74	74	63	67	66	74	
	19	92	88	85	90	91	89	89	90	92	90	89	
	20	81	77	77	76	68	73	66	68	71	74	71	
	21	79	80	77	77	71	70	73	73	74	80	75	
	22	—	—	—	—	—	—	—	—	—	—	—	
	23	80	83	82	79	71	75	65	58	58	63	67	
	24	91	89	90	88	82	74	79	68	79	71	69	
	25	84	81	87	90	80	78	86	73	76	75	80	
	26	75	72	71	76	79	76	85	85	85	70	71	
	27	76	82	85	88	74	71	75	80	81	79	75	
	28	93	93	82	84	85	82	72	68	67	68	76	
	29	—	—	—	—	—	—	—	—	—	—	—	
	30	80	86	84	83	76	77	76	78	81	79	76	
	Hourly Means	88	87	86	86	83	80	79	77	78	77	77	81
	Tension of the Vapour. NOVEMBER.	2	.317	.308	.311	.331	.333	.368	.356	.354	.362	.375	.379
3		.300	.298	.305	.315	.323	.313	.312	.300	.307	.291	.317	
4		.240	.240	.272	.286	.252	.249	.239	.230	.223	.214	.212	
5		.201	.198	.201	.226	.216	.243	.243	.253	.240	.240	.243	
6		.161	.161	.136	.213	.252	.258	.254	.237	.243	.245	.199	
7		.204	.203	.217	.236	.244	.265	.273	.261	.259	.265	.241	
8		—	—	—	—	—	—	—	—	—	—	—	
9		.338	.337	.347	.354	.382	.374	.385	.384	.376	.378	.371	
10		.328	.333	.336	.350	.349	.354	.348	.352	.352	.355	.334	
11		.331	.340	.313	.346	.347	.346	.345	.351	.349	.354	.354	
12		.245	.236	.245	.253	.260	.256	.253	.263	.261	.264	.258	
13		.263	.260	.260	.263	.263	.272	.275	.270	.265	.265	.267	
14		.258	.249	.246	.248	.242	.238	.232	.250	.232	.212	.214	
15		—	—	—	—	—	—	—	—	—	—	—	
16		.255	.259	.268	.272	.288	.297	.293	.280	.277	.275	.272	
17		.227	.234	.248	.261	.265	.270	.272	.270	.272	.276	.278	
18		.263	.257	.283	.315	.324	.302	.292	.248	.250	.245	.247	
19		.241	.250	.249	.224	.229	.232	.232	.231	.233	.233	.223	
20		.178	.169	.169	.168	.164	.181	.173	.184	.196	.199	.150	
21		.178	.173	.170	.175	.166	.172	.181	.187	.199	.219	.200	
22		—	—	—	—	—	—	—	—	—	—	—	
23		.135	.138	.138	.140	.141	.147	.130	.123	.128	.138	.144	
24		.175	.165	.171	.177	.189	.187	.198	.189	.197	.182	.160	
25		.117	.103	.198	.101	.089	.090	.076	.085	.091	.089	.095	
26		.081	.079	.085	.096	.107	.115	.130	.134	.138	.108	.103	
27		.103	.102	.108	.119	.106	.105	.119	.135	.144	.150	.146	
28		.204	.202	.189	.191	.196	.201	.187	.187	.187	.181	.188	
29		—	—	—	—	—	—	—	—	—	—	—	
30		.124	.121	.118	.123	.120	.123	.123	.126	.133	.125	.120	
Hourly Means		.218	.216	.223	.231	.235	.238	.241	.235	.237	.235	.230	.233



JR.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
95	94	96
76	82	89
53	57	65
69	75	84
68	57	72
76	70	62
—	—	—
94	91	93
90	85	84
90	90	86
80	79	81
81	84	87
70	72	75
—	—	—
88	90	89
85	86	80
66	74	76
90	89	90
73	74	77
80	75	86
—	—	—
65	67	78
71	69	76
75	80	87
79	71	75
79	75	75
68	76	76
—	—	—
79	76	79
77	77	81

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
96	97	97	96	96	95	95	96	90	90	93	95	94
89	89	89	88	88	84	88	93	91	89	92	92	87
71	78	78	80	80	82	84	86	89	88	87	89	77
93	97	88	92	88	92	91	89	91	87	99	87	83
70	75	77	85	89	88	89	90	81	82	86	85	79
59	61	63	63	61	61	—	—	—	—	—	—	—
—	—	—	—	—	—	92	88	91	97	97	94	78
90	93	92	92	90	91	91	92	94	92	91	92	93
85	84	85	85	81	82	88	89	88	88	91	88	87
89	86	85	80	80	81	93	82	82	83	83	80	87
83	80	81	79	81	81	82	80	80	86	80	80	80
87	85	85	87	86	86	86	87	86	88	87	99	86
75	74	80	76	77	79	—	—	—	—	—	—	—
—	—	—	—	—	—	90	89	90	91	93	93	83
93	93	92	90	90	89	91	89	91	91	89	91	90
92	92	92	92	91	89	92	89	90	90	91	93	89
83	82	83	85	88	89	90	93	96	93	90	92	84
91	91	88	93	85	87	87	87	87	87	88	84	89
77	83	86	89	92	93	93	86	89	87	82	81	80
80	84	79	81	79	80	—	—	—	—	—	—	—
—	—	—	—	—	—	71	69	73	71	79	83	77
78	77	74	81	78	92	93	86	87	90	90	95	78
80	78	78	81	79	80	89	82	75	79	80	90	80
91	91	87	75	75	75	77	74	69	82	81	81	81
78	76	71	73	74	75	75	80	85	78	72	76	77
66	72	82	83	92	95	95	95	95	95	96	93	83
74	79	73	86	82	89	—	—	—	—	—	—	—
—	—	—	—	—	—	71	76	81	80	74	—	78
79	82	86	95	88	89	82	82	86	86	88	87	83
82	83	83	84	84	85	87	86	86	87	88	87	83

In.	In.	In.
'375	'375	'379
'294	'317	'307
'214	'212	'215
'240	'243	'236
'245	'199	'222
'265	'244	'245
—	—	—
'378	'371	'376
'355	'341	'324
'354	'354	'329
'264	'258	'266
'265	'267	'272
'212	'211	'315
—	—	—
'275	'272	'279
'276	'278	'290
'235	'247	'244
'233	'223	'211
'199	'150	'185
'219	'200	'200
—	—	—
'138	'144	'158
'182	'160	'156
'089	'085	'103
'108	'103	'102
'150	'146	'154
'181	'188	'180
—	—	—
'125	'120	'118
'235	'230	'233

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
'377	'373	'376	'361	'350	'343	'328	'335	'279	'244	'269	'280	'237
'307	'302	'301	'301	'301	'263	'243	'246	'228	'234	'235	'242	'287
'212	'218	'211	'204	'202	'205	'208	'205	'207	'204	'198	'199	'223
'215	'201	'185	'193	'172	'170	'156	'159	'161	'152	'169	'159	'203
'203	'199	'183	'194	'195	'197	'199	'190	'188	'184	'193	'194	'204
'211	'215	'230	'231	'214	'214	—	—	—	—	—	—	'257
—	—	—	—	—	—	'316	'304	'329	'341	'344	'336	'327
'357	'359	'354	'355	'347	'345	'345	'340	'335	'338	'337	'328	'355
'326	'324	'326	'329	'328	'322	'311	'334	'331	'323	'331	'323	'336
'329	'316	'309	'273	'264	'262	'265	'263	'264	'264	'263	'252	'311
'261	'257	'257	'259	'254	'247	'249	'247	'247	'247	'246	'248	'253
'272	'268	'268	'270	'263	'256	'254	'258	'254	'257	'253	'264	'268
'221	'228	'252	'245	'247	'259	—	—	—	—	—	—	'245
—	—	—	—	—	—	'255	'251	'252	'241	'249	'254	'245
'276	'278	'269	'263	'262	'258	'251	'247	'244	'233	'232	'233	'265
'281	'289	'287	'296	'299	'297	'298	'280	'284	'281	'279	'259	'275
'251	'239	'239	'242	'246	'240	'246	'253	'255	'249	'239	'241	'258
'210	'210	'212	'211	'194	'188	'188	'188	'188	'188	'190	'178	'212
'181	'191	'193	'193	'191	'186	'178	'173	'184	'189	'188	'180	'183
'210	'224	'230	'238	'235	'228	—	—	—	—	—	—	'182
—	—	—	—	—	—	'127	'123	'128	'125	'139	'137	'159
'159	'154	'152	'164	'157	'195	'199	'193	'195	'190	'187	'193	'157
'160	'143	'143	'145	'138	'138	'152	'135	'121	'119	'115	'124	'105
'105	'106	'091	'080	'080	'078	'080	'078	'075	'093	'094	'088	'097
'105	'106	'100	'102	'103	'111	'111	'120	'125	'112	'103	'103	'107
'136	'152	'167	'169	'179	'192	'197	'196	'195	'195	'207	'204	'153
'172	'177	'167	'180	'164	'167	—	—	—	—	—	—	'170
—	—	—	—	—	—	'124	'119	'122	'134	'131	'125	'107
'108	'107	'109	'109	'096	'095	'086	'080	'085	'076	'080	'077	'107
'226	'225	'225	'224	'219	'24	'216	'212	'211	'209	'210	'209	'224

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. DECEMBER.	1	86	93	71	81	81	81	80	79	80	84	83
	2	91	94	95	95	97	96	96	95	92	92	90
	3	71	71	65	57	69	70	75	80	59	65	70
	4	85	86	86	84	93	72	72	73	80	76	76
	5	78	88	88	81	86	81	78	75	75	79	87
	6	—	—	—	—	—	—	—	—	—	—	—
	7	78	75	82	80	80	81	81	81	83	84	84
	8	87	85	83	87	80	77	72	74	73	74	74
	9	80	78	79	76	81	80	81	79	75	76	76
	10	87	87	80	90	95	95	95	93	95	96	95
	11	82	78	81	78	75	72	74	76	76	80	77
	12	86	94	85	88	85	84	81	76	77	77	81
	13	—	—	—	—	—	—	—	—	—	—	—
	14	91	93	80	80	74	76	71	65	66	78	72
	15	100	100	100	95	85	81	62	60	65	54	60
	16	80	81	70	78	74	74	72	74	79	74	85
	17	85	87	85	89	86	90	85	84	82	82	81
	18	80	79	77	78	72	69	71	69	64	76	80
	19	82	80	89	84	77	73	69	74	89	79	69
	20	—	—	—	—	—	—	—	—	—	—	—
	21	83	81	75	76	75	67	63	60	55	56	62
	22	82	87	81	69	69	71	63	66	66	71	73
	23	100	100	100	100	93	83	79	77	74	71	76
	24	79	89	83	84	78	78	79	79	77	77	77
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—
	26	96	92	86	88	82	76	75	78	81	74	81
	27	—	—	—	—	—	—	—	—	—	—	—
	28	78	73	73	74	71	73	70	70	71	72	71
	29	76	86	81	79	74	75	83	80	75	76	76
	30	96	95	95	95	95	95	94	89	82	82	88
	31	96	95	98	94	93	90	90	88	88	83	88
Hourly Means	85	87	83	83	82	79	77	77	76	76	78	81
Tension of the Vapour. DECEMBER.	1	in. '076	in. '079	in. '066	in. '080	in. '097	in. '108	in. '110	in. '116	in. '121	in. '128	in. '128
	2	'179	'191	'198	'204	'216	'223	'229	'244	'257	'245	'255
	3	'140	'139	'125	'117	'136	'139	'150	'152	'114	'121	'124
	4	'121	'122	'128	'111	'165	'136	'140	'133	'157	'155	'155
	5	'131	'143	'143	'140	'156	'157	'155	'151	'151	'158	'164
	6	—	—	—	—	—	—	—	—	—	—	—
	7	'158	'151	'165	'176	'178	'186	'189	'192	'196	'198	'201
	8	'196	'192	'176	'188	'178	'171	'155	'161	'163	'161	'157
	9	'149	'144	'142	'135	'144	'143	'149	'147	'142	'143	'143
	10	'159	'159	'148	'153	'158	'161	'164	'166	'173	'177	'168
	11	'116	'105	'106	'104	'108	'110	'114	'121	'121	'130	'126
	12	'096	'095	'085	'086	'080	'085	'083	'079	'085	'088	'094
	13	—	—	—	—	—	—	—	—	—	—	—
	14	'087	'090	'079	'077	'073	'079	'079	'079	'085	'095	'084
	15	'098	'066	'073	'077	'087	'091	'079	'085	'096	'082	'085
	16	'067	'069	'063	'082	'091	'108	'110	'114	'121	'111	'121
	17	'104	'109	'108	'122	'125	'130	'129	'124	'122	'126	'122
	18	'066	'065	'061	'074	'078	'100	'108	'110	'126	'128	'128
	19	'135	'133	'113	'135	'128	'128	'126	'142	'159	'148	'126
	20	—	—	—	—	—	—	—	—	—	—	—
	21	'101	'093	'079	'084	'088	'086	'088	'088	'086	'086	'091
	22	'101	'101	'091	'082	'085	'089	'083	'089	'095	'102	'102
	23	'066	'057	'058	'072	'085	'086	'089	'094	'097	'091	'092
	24	'120	'139	'132	'140	'137	'152	'151	'154	'154	'155	'154
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—
	26	'093	'089	'084	'094	'105	'112	'123	'131	'142	'138	'142
	27	—	—	—	—	—	—	—	—	—	—	—
	28	'160	'118	'150	'152	'148	'144	'124	'132	'125	'121	'125
	29	'083	'093	'092	'097	'107	'115	'127	'124	'116	'121	'121
	30	'207	'209	'208	'212	'214	'226	'219	'221	'198	'193	'198
	31	'188	'187	'202	'206	'215	'213	'213	'215	'219	'207	'210
Hourly Means	'122	'122	'119	'125	'130	'133	'134	'137	'139	'139	'138	'140

<sup>a</sup> Christmas Day.

Note.—Wet Thermometer higher than the Dry Thermometer where the reading appears in italics.

UR.		
9	10	11
3	4	5
84	83	82
92	90	91
65	70	72
76	76	78
79	87	88
—	—	—
84	81	80
74	74	74
76	76	77
96	95	96
80	77	81
77	81	81
—	—	—
78	72	74
54	60	67
74	85	82
82	81	79
76	80	76
79	69	81
—	—	—
56	62	79
71	73	70
71	77	77
—	—	—
74	81	79
—	—	—
72	71	74
76	76	77
82	88	84
83	88	93
76	78	81
In.	In.	In.
.128	.128	.132
.245	.239	.255
.121	.124	.128
.155	.155	.156
.158	.161	.168
—	—	—
.198	.201	.221
.161	.157	.163
.143	.143	.141
.177	.168	.154
.130	.126	.133
.088	.094	.100
—	—	—
.085	.084	.085
.082	.085	.081
.111	.121	.106
.126	.122	.105
.126	.128	.123
.118	.126	.133
—	—	—
.086	.091	.094
.102	.102	.106
.094	.092	.094
.155	.151	.167
—	—	—
.148	.142	.150
—	—	—
.124	.123	.124
.121	.121	.125
.195	.168	.195
.207	.210	.215
.139	.138	.110

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
85	77	83	79	78	80	82	87	85	92	90	90	83
86	93	93	89	87	83	75	67	82	81	80	73	88
73	79	74	77	80	74	78	78	78	80	80	80	73
66	68	80	89	90	89	89	89	91	90	87	84	82
84	74	75	78	79	80	—	—	—	—	—	—	81
—	—	—	—	—	—	86	81	81	81	80	80	81
80	89	92	91	95	94	94	89	93	95	95	94	87
80	79	78	78	80	78	76	78	79	78	82	82	79
78	86	85	83	78	83	79	81	84	84	85	84	79
86	94	90	87	89	87	88	91	89	89	87	86	90
80	80	83	80	80	81	90	91	87	87	91	85	81
82	79	86	82	85	82	—	—	—	—	—	—	85
—	—	—	—	—	—	91	89	93	92	95	91	85
88	81	81	92	85	99	100	97	99	100	99	100	85
88	93	95	96	98	96	95	96	97	86	86	87	85
86	84	80	86	88	89	89	89	87	86	87	87	82
86	91	84	92	94	74	81	86	73	68	70	66	82
76	75	73	67	68	59	64	70	70	75	77	85	73
—	—	—	—	—	—	—	—	—	—	—	—	77
91	91	89	88	88	81	74	80	75	79	78	82	75
85	89	83	82	89	89	91	100	100	86	98	100	81
93	89	93	89	88	96	94	88	92	92	93	84	89
81	78	79	79	82	81	—	—	—	—	—	—	83
—	—	—	—	—	—	92	91	85	89	93	99	—
74	75	78	77	73	78	—	—	—	—	—	—	82
—	—	—	—	—	—	86	91	89	91	89	78	—
78	80	59	71	69	73	66	83	70	78	85	89	74
81	78	77	72	75	80	86	88	88	89	90	96	81
90	93	90	94	93	91	93	92	94	95	96	94	92
97	95	90	95	95	95	91	93	91	91	88	89	92
83	83	83	83	84	83	85	86	86	86	86	87	82
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
.136	.131	.146	.145	.143	.150	.152	.161	.163	.172	.170	.171	.129
.263	.279	.278	.248	.245	.287	.256	.185	.211	.190	.174	.152	.227
.130	.133	.123	.123	.120	.106	.108	.109	.110	.114	.115	.110	.124
.132	.134	.153	.162	.163	.161	.159	.159	.162	.161	.150	.141	.147
.152	.129	.130	.135	.133	.135	—	—	—	—	—	—	.148
—	—	—	—	—	—	.156	.152	.152	.152	.155	—	.155
.221	.221	.220	.226	.228	.229	.229	.217	.215	.218	.212	.211	.203
.158	.156	.154	.151	.153	.147	.145	.148	.142	.137	.147	.153	.160
.146	.152	.150	.146	.145	.144	.137	.137	.141	.141	.139	.133	.143
.154	.155	.141	.132	.133	.133	.134	.138	.133	.133	.131	.126	.149
.129	.131	.136	.131	.130	.126	.132	.109	.099	.095	.095	.092	.117
.098	.095	.097	.091	.085	.082	—	—	—	—	—	—	.088
—	—	—	—	—	—	.081	.084	.087	.085	.088	.087	.081
.081	.084	.089	.081	.077	.074	.075	.078	.079	.083	.070	.069	.081
.089	.088	.083	.074	.077	.072	.072	.070	.072	.071	.068	.070	.078
.112	.115	.124	.113	.117	.110	.110	.110	.110	.110	.112	.109	.105
.091	.090	.086	.102	.100	.077	.078	.082	.068	.066	.065	.061	.100
.123	.117	.113	.116	.112	.102	.119	.119	.119	.125	.126	.140	.106
.125	.122	.121	.126	.125	.125	—	—	—	—	—	—	.125
—	—	—	—	—	—	.103	.108	.098	.099	.103	.101	.125
.088	.082	.081	.081	.088	.086	.089	.084	.091	.099	.099	.129	.090
.096	.097	.102	.105	.114	.111	.105	.097	.069	.078	.076	.069	.093
.081	.090	.092	.098	.084	.080	.081	.082	.084	.084	.089	.101	.084
.167	.165	.166	.164	.171	.172	—	—	—	—	—	—	.142
—	—	—	—	—	—	.111	.112	.102	.105	.105	.099	—
.142	.146	.151	.152	.149	.166	—	—	—	—	—	—	.148
—	—	—	—	—	—	.220	.218	.213	.211	.208	.161	.121
.128	.130	.090	.102	.097	.101	.099	.107	.085	.098	.103	.101	.121
.126	.133	.132	.130	.137	.150	.162	.166	.166	.179	.186	.202	.133
.192	.197	.188	.191	.186	.183	.186	.190	.197	.188	.188	.186	.199
.223	.217	.200	.212	.207	.206	.206	.203	.200	.202	.191	.193	.206
.138	.138	.137	.135	.135	.135	.135	.132	.130	.131	.129	.128	.133

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JANUARY.	1	88	87	89	87	88	87	87	86	84	83	86
	2	74	76	70	74	71	71	79	80	81	81	81
	3	—	—	—	—	—	—	—	—	—	—	—
	4	78	74	73	74	71	61	73	78	84	87	91
	5	67	62	50	59	51	55	55	46	68	63	74
	6	73	73	75	74	90	74	55	55	55	39	63
	7	80	87	87	90	90	89	78	78	76	71	73
	8	75	83	77	87	81	74	75	74	75	81	80
	9	89	82	89	79	78	75	67	69	61	69	71
	10	—	—	—	—	—	—	—	—	—	—	—
	11	88	90	99	89	74	70	70	65	58	61	65
	12	68	83	76	72	69	69	66	61	63	62	72
	13	66	66	69	71	67	60	68	64	66	68	65
	14	81	87	91	91	89	92	92	82	81	83	88
	15	92	93	93	95	95	95	95	93	93	92	95
	16	82	71	64	61	63	61	80	95	69	59	59
	17	—	—	—	—	—	—	—	—	—	—	—
	18	77	70	72	72	69	60	60	65	57	53	53
	19	83	95	76	78	55	56	54	60	61	65	62
	20	83	87	83	80	67	56	60	59	58	63	57
	21	78	79	69	69	64	59	80	80	80	77	76
	22	77	75	83	75	77	65	67	65	63	49	73
	23	64	65	63	61	54	55	60	43	46	44	47
	24	—	—	—	—	—	—	—	—	—	—	—
	25	78	71	83	72	72	71	71	55	55	79	71
	26	88	92	93	89	92	95	91	90	81	82	74
	27	80	86	81	79	75	71	67	67	67	62	61
	28	95	92	90	94	79	82	87	85	89	85	87
	29	90	86	85	78	79	88	80	69	66	80	85
	30	69	72	78	73	71	63	59	68	68	69	75
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	79	80	79	78	74	71	72	71	70	70	73	75
Tension of the Vapour. JANUARY.	1	.191	.188	.190	.183	.184	.182	.183	.179	.169	.167	.167
	2	.156	.161	.147	.155	.153	.153	.175	.177	.176	.170	.168
	3	—	—	—	—	—	—	—	—	—	—	—
	4	.155	.150	.118	.151	.116	.130	.119	.158	.168	.174	.183
	5	.116	.133	.110	.123	.108	.123	.120	.106	.152	.132	.154
	6	.124	.130	.129	.136	.170	.148	.108	.107	.104	.110	.119
	7	.131	.135	.133	.134	.131	.128	.110	.103	.099	.098	.096
	8	.055	.057	.051	.057	.055	.053	.054	.056	.057	.063	.060
	9	.069	.065	.069	.066	.069	.069	.068	.076	.069	.075	.075
	10	—	—	—	—	—	—	—	—	—	—	—
	11	.047	.046	.049	.055	.055	.055	.056	.053	.050	.055	.057
	12	.056	.070	.066	.065	.066	.069	.067	.063	.066	.061	.072
	13	.091	.093	.101	.107	.115	.106	.122	.126	.133	.136	.128
	14	.168	.182	.193	.203	.192	.202	.211	.203	.196	.199	.204
	15	.201	.203	.204	.218	.222	.226	.231	.247	.245	.231	.229
	16	.174	.147	.124	.113	.117	.111	.157	.161	.109	.079	.071
	17	—	—	—	—	—	—	—	—	—	—	—
	18	.121	.131	.134	.136	.136	.125	.124	.132	.116	.103	.100
	19	.059	.066	.055	.055	.040	.043	.043	.046	.047	.049	.045
	20	.052	.054	.054	.059	.060	.059	.068	.068	.068	.075	.066
	21	.069	.068	.057	.058	.054	.049	.059	.059	.056	.049	.046
	22	.051	.049	.053	.051	.053	.051	.052	.055	.056	.043	.066
	23	.080	.084	.083	.083	.091	.100	.111	.081	.087	.083	.090
	24	—	—	—	—	—	—	—	—	—	—	—
	25	.079	.084	.087	.084	.098	.099	.101	.107	.108	.114	.106
	26	.127	.149	.173	.169	.176	.188	.187	.165	.130	.121	.108
	27	.067	.067	.068	.071	.069	.066	.063	.061	.064	.057	.053
	28	.054	.051	.054	.063	.064	.080	.094	.096	.106	.106	.105
	29	.107	.112	.114	.110	.120	.141	.139	.128	.126	.139	.140
	30	.085	.088	.083	.085	.080	.064	.061	.069	.069	.069	.070
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.104	.107	.105	.111	.109	.108	.112	.111	.109	.106	.107	.107

R.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
83	86	87	89	88	87	87	90	90	94	94	87	89	86	74	87
81	81	78	74	73	74	72	73	73	—	—	—	—	—	—	78
—	—	—	—	—	—	—	—	—	95	93	84	83	86	80	81
87	91	91	91	92	92	96	94	87	80	73	77	73	81	74	81
63	74	61	64	68	65	69	69	62	72	75	81	85	78	73	66
59	63	65	54	67	64	69	66	63	66	68	67	70	73	77	67
71	73	76	68	67	69	72	55	67	73	81	85	75	75	81	77
81	80	80	80	78	78	77	85	85	75	79	78	77	77	77	79
69	71	72	70	68	71	77	72	73	—	—	—	—	—	—	75
—	—	—	—	—	—	—	—	—	74	92	100	60	52	72	77
61	65	69	76	71	81	80	79	86	—	80	89	83	80	83	77
62	72	85	92	79	81	79	79	82	93	82	72	83	74	73	75
68	65	73	76	72	76	74	78	78	72	78	79	79	76	76	72
83	88	88	92	95	94	92	94	90	86	93	90	90	88	94	85
92	95	95	95	95	95	95	91	90	88	88	87	90	84	86	92
59	59	56	66	69	70	73	73	77	—	—	—	—	—	—	70
—	—	—	—	—	—	—	—	—	77	72	69	69	71	72	69
53	53	60	73	90	80	87	87	86	66	59	61	69	70	76	72
65	62	72	65	75	77	73	71	76	76	79	83	83	76	79	72
63	57	65	69	69	78	80	80	84	80	82	78	81	77	78	73
77	76	83	95	95	85	76	81	81	83	83	85	81	79	79	79
49	73	77	78	77	79	72	61	70	62	65	69	69	62	63	70
44	47	56	63	74	76	79	83	78	—	—	—	—	—	—	67
—	—	—	—	—	—	—	—	—	95	84	81	80	79	75	80
79	71	74	78	78	79	77	85	82	85	87	92	86	89	89	80
82	74	71	74	73	77	69	66	73	72	76	75	74	79	81	80
62	61	63	65	76	81	85	83	85	85	90	100	100	100	76	78
85	87	90	89	88	89	94	97	89	92	83	88	89	92	91	89
80	85	89	89	85	93	91	89	84	79	86	86	75	76	72	83
69	55	81	79	79	75	75	80	83	—	—	—	—	—	—	74
—	—	—	—	—	—	—	—	—	73	61	63	79	86	87	—
70	73	73	78	78	79	80	80	80	80	80	81	80	79	78	77
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
.167	.167	.167	.166	.162	.162	.160	.168	.174	.191	.189	.187	.191	.183	.156	.177
.170	.168	.169	.155	.153	.151	.147	.148	.148	—	—	—	—	—	—	.155
—	—	—	.187	.202	.199	.223	.226	.233	.131	.126	.143	.150	.164	.153	.177
.171	.183	.187	.131	.141	.137	.142	.142	.129	.141	.142	.153	.145	.131	.123	.133
.132	.151	.126	.096	.119	.142	.118	.113	.107	.110	.142	.112	.117	.122	.127	.119
.110	.119	.117	.098	.096	.067	.068	.055	.060	.066	.071	.071	.068	.067	.069	.091
.098	.096	.066	.063	.060	.058	.058	.056	.058	.058	.052	.057	.058	.059	.059	.037
.063	.060	.056	.075	.073	.070	.074	.076	.072	.072	—	—	—	—	—	.064
.075	.075	.071	—	—	—	—	—	—	.049	.055	.054	.028	.025	.033	.061
—	—	—	.055	.057	.060	.061	.058	.065	.068	.065	.072	.070	.068	.068	.059
—	—	—	.061	.061	.072	.079	.078	.080	.081	.088	.097	.095	.098	.098	.075
—	—	—	.136	.128	.137	.139	.134	.137	.138	.143	.150	.146	.165	.169	.133
—	—	—	.199	.201	.199	.202	.203	.196	.195	.198	.193	.173	.182	.185	.198
—	—	—	.231	.229	.235	.243	.244	.258	.252	.249	.243	.230	.226	.214	.226
—	—	—	.079	.071	.059	.062	.061	.059	.060	.061	—	—	—	—	.100
—	—	—	.101	.100	.111	.126	.146	.130	.135	.127	.118	.091	.071	.069	.115
—	—	—	.019	.015	.019	.050	.049	.050	.048	.051	.052	.053	.049	.051	.112
—	—	—	.075	.066	.073	.076	.074	.079	.078	.078	.071	.071	.070	.073	.050
—	—	—	.049	.046	.048	.054	.051	.048	.046	.050	.049	.051	.053	.051	.068
—	—	—	.043	.066	.071	.070	.096	.067	.069	.069	.076	.070	.073	.077	.053
—	—	—	.083	.090	.095	.100	.108	.105	.102	.101	.096	—	—	—	.091
—	—	—	—	—	—	—	—	—	—	.090	.084	.085	.082	.080	.075
—	—	—	.114	.106	.102	.108	.108	.114	.125	.117	.117	.137	.133	.126	.109
—	—	—	.121	.108	.103	.107	.097	.101	.085	.080	.089	.081	.074	.072	.117
—	—	—	.057	.053	.058	.049	.052	.051	.053	.049	.051	.050	.052	.054	.057
—	—	—	.106	.105	.102	.089	.090	.092	.095	.093	.090	.097	.099	.103	.089
—	—	—	.139	.140	.140	.139	.134	.138	.132	.127	.114	.105	.109	.093	.121
—	—	—	.068	.070	.071	—	—	—	.056	.059	.062	—	—	—	.076
—	—	—	—	—	—	—	—	—	—	.099	.078	.080	.097	.105	.109
.106	.107	.107	.107	.107	.107	.107	.107	.107	.106	.103	.105	.105	.104	.102	.107

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Gatingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Framo Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. FEBRUARY.	1	83	85	82	84	82	90	90	89	93	88	92	91
	2	95	94	92	75	76	74	72	75	78	84	80	77
	3	99	100	98	97	97	97	97	97	98	89	81	76
	4	50	48	47	52	48	50	48	51	48	51	60	57
	5	62	62	60	54	58	52	70	59	69	70	75	77
	6	57	61	57	59	56	60	60	55	56	58	59	63
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	82	86	80	80	75	75	75	69	72	76	72	88
	9	80	79	82	74	75	77	66	70	65	68	68	67
	10	85	85	87	84	84	71	79	70	74	83	88	92
	11	73	73	70	68	72	71	67	74	65	65	63	70
	12	72	77	70	73	74	70	69	74	79	65	59	56
	13	71	65	71	73	64	65	61	60	63	63	59	60
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	81	80	75	72	73	58	63	53	58	56	58	93
	16	69	60	72	82	72	73	76	84	79	85	84	83
	17	82	82	84	78	81	81	74	77	77	76	62	78
	18	66	68	63	73	90	89	89	78	88	90	92	80
	19	74	76	77	85	82	83	78	80	88	88	87	88
	20	85	81	84	79	76	76	74	74	75	74	74	74
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	64	67	69	68	74	69	71	66	71	71	74	72
	23	79	21	29	33	36	39	51	51	45	46	53	68
	24	25	17	28	43	51	54	65	75	72	70	72	74
	25	57	53	53	60	59	55	56	55	65	64	67	70
	26	50	53	62	65	65	66	72	71	74	71	70	64
	27	89	89	91	91	95	94	96	91	96	95	95	95
	28	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	72	69	70	71	71	70	72	71	73	73	73	76	
Tension of the Vapour. FEBRUARY.		In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	.109	.115	.111	.120	.128	.153	.162	.166	.170	.164	.169	.161
	2	.148	.147	.161	.152	.180	.177	.174	.185	.197	.205	.190	.183
	3	.225	.227	.222	.217	.216	.215	.217	.220	.184	.162	.131	.110
	4	.040	.040	.038	.044	.044	.050	.052	.063	.061	.069	.074	.066
	5	.047	.045	.043	.042	.050	.050	.072	.066	.082	.084	.091	.083
	6	.048	.052	.049	.056	.059	.068	.074	.079	.084	.091	.093	.094
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	.133	.135	.130	.137	.140	.151	.154	.144	.148	.158	.148	.160
	9	.130	.120	.121	.117	.128	.139	.121	.129	.117	.121	.121	.118
	10	.126	.126	.128	.127	.140	.128	.144	.145	.153	.163	.159	.150
	11	.071	.072	.067	.069	.083	.084	.080	.091	.078	.078	.074	.076
	12	.061	.070	.063	.072	.085	.089	.090	.102	.119	.088	.069	.064
	13	.067	.062	.067	.078	.076	.084	.078	.083	.090	.090	.085	.086
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	.135	.130	.116	.106	.110	.085	.087	.071	.070	.069	.069	.067
	16	.071	.074	.075	.084	.060	.062	.067	.102	.103	.116	.111	.096
	17	.097	.095	.100	.107	.132	.141	.124	.132	.134	.139	.113	.131
	18	.080	.085	.083	.106	.152	.162	.169	.155	.167	.170	.169	.144
	19	.114	.116	.118	.127	.127	.137	.131	.139	.160	.163	.158	.151
	20	.125	.117	.118	.104	.096	.095	.097	.095	.094	.094	.092	.091
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	.061	.064	.065	.067	.075	.078	.079	.076	.080	.082	.085	.083
	23	.046	.042	.047	.021	.025	.030	.045	.049	.045	.047	.056	.068
	24	.013	.008	.018	.032	.047	.060	.078	.094	.091	.089	.089	.089
	25	.061	.054	.055	.070	.073	.075	.079	.080	.096	.094	.086	.085
	26	.034	.040	.062	.078	.096	.102	.109	.109	.111	.103	.100	.091
	27	.133	.133	.143	.140	.147	.152	.160	.156	.168	.165	.172	.176
28	—	—	—	—	—	—	—	—	—	—	—	—	
Hourly Means	.091	.088	.091	.095	.103	.107	.110	.114	.117	.117	.113	.112	

R.

9	10	11
3	4	5
88	92	91
84	80	77
89	81	76
51	60	57
70	75	77
58	59	63
—	—	—
76	72	88
68	68	67
83	88	92
65	63	70
65	59	56
63	59	60
—	—	—
56	58	93
85	84	83
76	62	78
90	92	80
88	87	88
74	74	74
—	—	—
71	74	72
46	53	68
70	72	74
64	67	70
71	70	64
95	95	95
—	—	—
73	73	76

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
91	94	88	82	83	86	89	92	90	89	90	95	88
79	80	79	82	91	95	94	94	90	90	95	98	85
75	66	61	68	68	59	65	65	62	60	56	49	78
58	57	69	67	64	59	58	63	62	65	64	64	57
75	62	60	59	59	61	65	67	61	62	64	64	64
75	80	75	67	69	71	—	—	—	—	—	—	68
—	—	—	—	—	—	82	85	84	79	77	83	85
90	90	95	93	91	91	95	89	89	95	96	86	85
71	68	70	77	80	81	80	78	77	74	73	85	74
91	85	81	74	77	80	81	80	77	79	78	70	81
78	77	74	76	72	80	82	80	80	79	76	73	73
57	56	55	67	65	60	51	58	63	63	67	82	66
61	63	61	64	66	68	—	—	—	—	—	—	72
—	—	—	—	—	—	98	98	95	95	90	89	—
64	58	55	57	55	54	56	52	69	70	72	75	65
77	86	86	84	80	81	78	78	77	77	80	77	78
72	73	66	72	68	72	74	78	73	73	70	70	74
85	84	81	77	77	81	81	76	75	77	74	87	80
89	88	89	89	90	86	91	91	91	87	87	85	85
74	74	78	71	68	67	—	—	—	—	—	—	73
—	—	—	—	—	—	68	69	69	67	66	66	—
70	69	60	64	47	50	47	42	37	38	30	100	62
32	51	45	56	29	34	31	15	29	22	15	16	39
74	72	74	71	66	68	70	72	65	74	70	71	62
70	66	49	53	37	47	45	53	45	42	42	60	55
73	66	70	71	76	82	86	88	86	90	90	90	73
100	98	90	80	88	93	—	—	—	—	—	—	87
—	—	—	—	—	—	84	60	67	68	71	70	—
75	73	71	72	70	71	73	72	70	71	71	76	72

In.	In.	In.
*164	*169	*161
*205	*190	*181
*162	*131	*110
*069	*074	*096
*084	*091	*063
*091	*093	*094
—	—	—
*158	*148	*160
*121	*121	*118
*163	*159	*150
*078	*074	*076
*088	*069	*061
*090	*085	*086
—	—	—
*069	*069	*097
*116	*111	*086
*139	*113	*131
*170	*169	*141
*163	*158	*151
*094	*092	*091
—	—	—
*082	*085	*083
*047	*056	*068
*089	*089	*089
*094	*096	*095
*103	*100	*091
*165	*172	*176
—	—	—
*117	*113	*112

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*161	*164	*159	*148	*146	*150	*155	*150	*142	*150	*153	*151	*148
*195	*199	*194	*194	*206	*209	*214	*210	*207	*208	*211	*213	*190
*098	*079	*069	*072	*067	*057	*061	*064	*057	*053	*048	*041	*130
*066	*062	*071	*066	*061	*056	*055	*056	*053	*054	*052	*051	*056
*060	*075	*070	*068	*067	*067	*066	*068	*058	*058	*056	*053	*065
*102	*099	*092	*081	*079	*082	—	—	—	—	—	—	*087
—	—	—	—	—	—	*093	*121	*125	*123	*119	*122	—
*160	*160	*164	*167	*165	*169	*173	*161	*159	*161	*168	*146	*154
*119	*112	*115	*126	*132	*127	*132	*108	*097	*088	*098	*121	*119
*115	*126	*123	*100	*087	*087	*086	*066	*060	*071	*073	*073	*116
*081	*079	*073	*074	*073	*081	*082	*079	*079	*076	*069	*058	*076
*063	*060	*058	*065	*062	*045	*041	*050	*058	*062	*069	*080	*070
*086	*082	*083	*082	*084	*087	—	—	—	—	—	—	*099
—	—	—	—	—	—	*162	*161	*158	*159	*150	*146	—
*073	*066	*063	*063	*057	*054	*056	*054	*075	*077	*077	*079	*081
*092	*107	*106	*110	*091	*087	*085	*187	*085	*085	*089	*083	*088
*118	*108	*094	*090	*076	*079	*075	*074	*071	*071	*076	*081	*102
*141	*141	*136	*123	*121	*127	*127	*129	*129	*121	*111	*135	*132
*151	*152	*151	*151	*152	*146	*147	*147	*146	*137	*135	*129	*141
*091	*091	*088	*086	*081	*080	—	—	—	—	—	—	—
—	—	—	—	—	—	*072	*071	*069	*064	*064	*062	*089
*080	*076	*061	*060	*048	*038	*034	*029	*024	*024	*019	*009	*057
*039	*032	*020	*023	*019	*019	*016	*008	*017	*013	*009	*008	*029
*086	*084	*091	*087	*079	*080	*084	*081	*075	*084	*079	*078	*071
*083	*061	*041	*045	*048	*040	*038	*043	*042	*029	*029	*046	*060
*106	*098	*101	*111	*120	*129	*135	*138	*135	*141	*141	*141	*106
*188	*184	*170	*153	*159	*161	—	—	—	—	—	—	—
—	—	—	—	—	—	*095	*069	*076	*079	*081	*078	*139
*109	*104	*100	*098	*095	*094	*095	*092	*090	*091	*091	*091	*100

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MARCH.	1	80	79	72	62	55	60	67	76	78	63	63
	2	76	82	75	74	61	56	58	67	61	63	71
	3	82	79	85	86	81	73	77	74	67	65	67
	4	85	86	88	79	68	61	62	61	69	65	70
	5	98	100	96	85	82	76	73	75	73	75	75
	6	82	84	86	69	78	66	70	70	69	69	76
	7	—	—	—	—	—	—	—	—	—	—	—
	8	84	66	67	67	70	74	67	76	74	68	59
	9	65	67	70	79	77	77	78	77	74	78	81
	10	89	88	88	78	75	65	60	54	59	61	77
	11	85	87	82	68	81	71	93	76	71	68	61
	12	92	90	88	78	56	57	56	50	51	64	68
	13	75	79	77	68	51	50	53	58	45	62	60
	14	—	—	—	—	—	—	—	—	—	—	—
	15	69	71	76	74	70	69	61	61	63	77	65
	16	82	82	78	73	68	64	61	73	67	79	84
	17	80	81	76	85	67	62	62	67	51	56	57
	18	81	78	78	75	62	49	55	60	61	63	52
	19	73	70	57	62	62	56	58	61	64	59	59
	20	78	80	82	79	86	74	72	72	74	74	83
	21	—	—	—	—	—	—	—	—	—	—	—
	22	86	85	83	86	86	86	87	76	80	83	86
	23	85	84	85	85	84	80	81	78	61	58	59
	24	77	77	77	79	70	73	67	54	58	50	60
	25	68	72	72	58	56	66	68	54	49	49	52
	26	55	66	60	68	63	69	70	66	75	61	86
	27	76	68	57	58	63	65	68	66	72	61	61
	28	—	—	—	—	—	—	—	—	—	—	—
	29	77	72	56	57	61	61	41	55	49	56	56
	30	73	69	68	65	65	58	57	56	61	70	63
	31	60	74	63	52	52	48	51	54	60	48	47
Hourly Means	78	78	76	72	69	65	66	66	64	65	67	
Tension of the Vapour. MARCH.	1	.090	.088	.089	.083	.074	.087	.103	.122	.129	.104	.101
	2	.082	.086	.088	.093	.082	.082	.091	.114	.107	.107	.116
	3	.106	.119	.131	.110	.111	.141	.157	.143	.139	.156	.146
	4	.075	.076	.103	.111	.101	.099	.108	.115	.129	.125	.127
	5	.081	.073	.081	.090	.115	.120	.117	.125	.127	.128	.128
	6	.132	.139	.174	.136	.157	.142	.147	.145	.142	.139	.150
	7	—	—	—	—	—	—	—	—	—	—	—
	8	.115	.096	.105	.111	.124	.149	.141	.160	.132	.123	.107
	9	.070	.072	.074	.088	.093	.093	.091	.090	.087	.093	.097
	10	.113	.115	.133	.135	.115	.132	.125	.118	.129	.136	.165
	11	.077	.080	.082	.075	.087	.084	.107	.091	.089	.085	.073
	12	.058	.057	.066	.072	.059	.062	.061	.058	.063	.081	.085
	13	.055	.057	.063	.051	.055	.060	.068	.075	.069	.092	.085
	14	—	—	—	—	—	—	—	—	—	—	—
	15	.060	.066	.073	.076	.076	.087	.072	.078	.084	.088	.079
	16	.060	.060	.065	.067	.071	.069	.076	.082	.089	.098	.102
	17	.073	.079	.084	.112	.100	.112	.120	.127	.103	.113	.112
	18	.131	.131	.143	.136	.127	.111	.129	.141	.150	.154	.142
	19	.089	.101	.096	.108	.122	.118	.129	.132	.136	.128	.129
	20	.146	.152	.155	.159	.179	.163	.168	.168	.174	.172	.183
	21	—	—	—	—	—	—	—	—	—	—	—
	22	.122	.129	.137	.143	.152	.152	.156	.140	.145	.149	.153
	23	.164	.167	.170	.172	.178	.180	.199	.185	.168	.150	.147
	24	.121	.125	.129	.145	.134	.148	.138	.147	.127	.118	.135
	25	.134	.139	.166	.166	.160	.178	.179	.139	.132	.133	.135
	26	.100	.116	.111	.121	.119	.135	.141	.139	.167	.140	.173
	27	.080	.069	.061	.066	.077	.084	.090	.091	.097	.630	.090
	28	—	—	—	—	—	—	—	—	—	—	—
	29	.138	.141	.125	.143	.174	.170	.127	.151	.125	.153	.122
	30	.094	.091	.101	.093	.097	.092	.089	.083	.091	.099	.088
	31	.053	.071	.065	.053	.060	.059	.068	.075	.085	.073	.071
Hourly Means	.097	.100	.106	.110	.114	.115	.119	.119	.119	.120	.120	



UR.

9	10	11
3	4	5
63	63	65
63	71	70
65	67	71
65	70	70
75	75	71
69	76	80
67	—	—
68	59	63
78	81	81
61	77	82
68	61	59
64	68	72
62	60	63
—	—	—
77	65	70
79	84	79
56	57	54
63	52	63
59	59	61
74	83	85
—	—	—
83	86	87
58	59	59
50	60	59
49	52	70
61	86	82
61	64	55
—	—	—
56	56	57
70	63	73
48	47	60
65	67	69
In.	In.	In.
*101	*101	*101
*107	*116	*101
*156	*110	*117
*125	*127	*124
*128	*128	*120
*139	*150	*102
—	—	—
*123	*107	*110
*093	*097	*098
*136	*165	*168
*085	*073	*090
*081	*083	*087
*092	*085	*085
—	—	—
*088	*079	*083
*098	*102	*095
*113	*112	*105
*154	*132	*165
*128	*129	*126
*172	*183	*186
—	—	—
*149	*153	*117
*150	*147	*141
*118	*135	*128
*133	*135	*153
*140	*153	*164
*030	*090	*081
—	—	—
*153	*122	*116
*099	*088	*100
*073	*071	*085
*120	*120	*121

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
68	70	74	65	73	79	83	82	82	83	73	76	72	
75	75	76	77	78	59	82	76	77	80	79	81	72	
86	81	82	86	89	93	90	97	82	85	76	85	81	
69	71	68	74	82	81	83	86	90	90	93	95	77	
76	83	84	83	85	87	89	86	85	85	85	85	83	
67	65	71	78	80	79	—	—	—	—	—	—	77	
—	—	—	—	—	—	85	83	91	90	94	94	77	
75	78	81	82	81	76	76	75	73	72	69	67	73	
84	91	87	89	89	88	89	88	94	85	89	89	82	
67	68	61	75	78	82	79	81	79	80	81	86	75	
70	68	70	72	80	78	90	90	92	100	99	100	80	
72	54	63	64	76	77	79	80	75	79	79	81	71	
64	60	63	67	67	70	—	—	—	—	—	—	64	
—	—	—	—	—	—	75	70	65	70	61	58	—	
75	79	79	83	73	70	78	80	77	77	77	88	73	
58	60	58	62	72	79	76	82	87	79	77	67	73	
70	72	63	62	63	69	72	72	75	77	77	77	69	
63	65	52	51	65	71	75	76	79	83	82	83	67	
59	72	71	80	80	78	80	77	80	78	78	78	69	
70	85	87	78	73	72	—	—	—	—	—	—	80	
85	—	—	—	—	—	84	81	86	87	85	78	—	
87	87	87	88	87	86	79	82	82	82	86	85	85	
55	67	67	66	72	72	62	71	69	70	73	75	72	
67	71	70	70	72	72	72	73	72	72	71	72	69	
86	85	68	88	89	87	86	75	71	62	56	56	68	
82	79	78	66	67	64	66	65	72	65	68	70	69	
31	42	45	51	63	67	67	—	—	—	—	—	64	
—	—	—	—	—	—	87	69	76	75	72	75	—	
72	57	79	81	67	70	60	63	63	61	68	68	63	
85	88	81	77	78	82	79	82	83	78	80	78	73	
65	57	58	66	67	70	60	65	57	76	81	75	61	
71	71	71	73	76	76	78	78	74	79	78	78	73	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
*100	*100	*103	*091	*100	*106	*110	*107	*107	*101	*087	*083	*099	
*102	*102	*103	*101	*102	*074	*097	*090	*088	*090	*093	*101	*096	
*106	*146	*145	*122	*119	*101	*105	*107	*105	*115	*103	*089	*129	
*118	*114	*105	*107	*100	*091	*087	*081	*085	*077	*081	*083	*101	
*119	*112	*118	*124	*122	*121	*123	*127	*129	*131	*129	*129	*116	
*123	*122	*131	*117	*119	*116	—	—	—	—	—	—	*149	
—	—	—	—	—	—	*200	*196	*176	*170	*157	*101	—	
*113	*104	*101	*095	*091	*081	*081	*080	*077	*076	*074	*072	*105	
*101	*110	*109	*118	*121	*125	*122	*113	*120	*104	*112	*112	*101	
*129	*121	*103	*101	*091	*093	*087	*090	*081	*079	*078	*077	*115	
*077	*069	*067	*063	*064	*057	*062	*061	*058	*059	*060	*059	*073	
*079	*058	*063	*061	*068	*066	*067	*067	*065	*067	*061	*063	*067	
*079	*069	*068	*071	*071	*074	—	—	—	—	—	—	*073	
—	—	—	—	—	—	*109	*094	*080	*077	*060	*065	—	
*081	*079	*077	*071	*062	*060	*068	*068	*062	*062	*061	*063	*073	
*069	*069	*064	*063	*067	*070	*037	*070	*073	*066	*067	*075	*073	
*121	*125	*108	*106	*106	*115	*121	*121	*123	*124	*126	*127	*111	
*139	*111	*100	*091	*109	*113	*115	*111	*113	*119	*117	*115	*127	
*127	*120	*111	*120	*126	*131	*131	*131	*111	*143	*143	*143	*125	
*186	*186	*188	*185	*153	*146	—	—	—	—	—	—	*156	
—	—	—	—	—	—	*126	*117	*117	*118	*117	*105	—	
*159	*159	*159	*159	*157	*158	*151	*155	*115	*156	*165	*165	*150	
*133	*146	*145	*143	*144	*142	*118	*130	*126	*123	*127	*128	*151	
*135	*133	*131	*127	*131	*125	*125	*128	*136	*142	*140	*140	*132	
*201	*190	*149	*190	*188	*171	*166	*151	*138	*120	*102	*100	*154	
*150	*145	*143	*116	*112	*103	*103	*097	*102	*090	*090	*167	*127	
*043	*059	*058	*062	*076	*081	—	—	—	—	—	—	*091	
—	—	—	—	—	—	*157	*132	*138	*135	*135	*139	—	
*130	*099	*128	*126	*099	*103	*186	*090	*089	*090	*091	*093	*126	
*106	*108	*105	*095	*092	*097	*091	*091	*095	*082	*082	*075	*093	
*089	*066	*066	*067	*058	*059	*056	*054	*048	*055	*055	*051	*064	
*118	*113	*109	*108	*107	*101	*112	*106	*103	*103	*101	*101	*110	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. APRIL.	1 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—
	5	—	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—
	11	—	—	—	—	—	—	—	—	—	—	—
	12	—	—	—	—	—	—	—	—	—	—	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	—	—	—	—	—	—	—	—	—	—	—
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	—	—	—	—
	17	—	—	—	—	—	—	—	—	—	—	—
	18	—	—	—	—	—	—	—	—	—	—	—
	19	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—
	22	—	—	—	—	—	—	—	—	—	—	—
	23	—	—	—	—	—	—	—	—	—	—	—
	24	—	—	—	—	—	—	—	—	—	—	—
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	—	—	—	—	—	—	—	—	—	—	—
Tension of the Vapour. APRIL.	1 <sup>a</sup>	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	—	—	—	—	—	—	—	—	—	—	—
	3	—	—	—	—	—	—	—	—	—	—	—
	4	—	—	—	—	—	—	—	—	—	—	—
	5	—	—	—	—	—	—	—	—	—	—	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	—	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—	—	—
	11	—	—	—	—	—	—	—	—	—	—	—
	12	—	—	—	—	—	—	—	—	—	—	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	—	—	—	—	—	—	—	—	—	—	—
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	—	—	—	—
	17	—	—	—	—	—	—	—	—	—	—	—
	18	—	—	—	—	—	—	—	—	—	—	—
	19	—	—	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	—	—	—	—	—	—	—	—	—	—
	22	—	—	—	—	—	—	—	—	—	—	—
	23	—	—	—	—	—	—	—	—	—	—	—
	24	—	—	—	—	—	—	—	—	—	—	—
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	—	—	—	—	—	—	—	—	—	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	—	—	—	—	—	—	—	—	—	—	—

\* No reliable observations for this month.



HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hour of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. MAY.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	—	—	—	—	—	—	—	—	—	—	
	4	85	81	75	70	69	68	57	55	58	56	59	61
	5	84	72	62	66	58	54	54	47	45	44	46	—
	6	95	82	69	63	54	50	46	48	55	52	55	46
	7	98	67	67	58	58	54	59	52	55	55	49	53
	8	74	73	64	52	54	52	52	52	46	42	42	54
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	77	68	66	62	61	67	67	69	70	70	75	79
	11	97	97	96	84	76	76	65	69	69	74	80	85
	12	96	93	82	83	81	76	77	72	71	86	82	85
	13	89	78	71	66	60	67	57	57	58	59	59	58
	14	73	61	72	61	56	63	65	65	66	68	57	63
	15	89	69	67	64	62	63	59	61	57	53	56	59
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	84	74	72	68	58	68	57	56	50	46	45	43
	18	83	74	68	74	66	56	54	56	59	57	57	58
	19	80	67	63	62	72	69	65	62	62	58	60	65
	20	73	69	58	51	48	50	50	54	51	51	56	63
	21	88	81	85	79	82	84	72	69	69	69	66	66
	22	95	91	93	90	81	77	76	80	79	80	80	81
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	96	96	94	97	97	97	91	92	94	92	81	88
	25	97	94	89	89	85	83	76	77	73	81	87	88
	26	74	74	68	64	60	63	72	67	64	64	63	61
	27	94	86	78	74	73	72	74	74	57	65	65	67
	28	79	83	81	79	72	68	68	63	63	67	68	71
	29	83	83	82	80	79	78	81	88	83	85	85	85
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	95	95	96	95	95	96	97	98	97	96	96	96
Hourly Means	87	80	76	72	69	69	66	66	65	66	66	69	
Tension of the Vapour. MAY.	1	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	—	—	—	—	—	—	—	—	—	—	
	4	199	234	248	246	272	277	247	229	222	222	228	241
	5	184	224	232	263	265	266	266	251	258	230	242	—
	6	237	258	262	226	249	255	264	269	291	259	259	242
	7	255	240	268	261	271	262	291	276	307	263	241	255
	8	246	255	248	241	243	227	230	239	252	247	248	279
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	259	271	290	290	309	337	335	348	372	373	401	399
	11	375	375	389	422	432	442	391	398	397	423	400	443
	12	397	403	420	438	461	465	485	455	423	458	416	454
	13	370	367	360	353	313	292	297	322	328	342	346	344
	14	291	306	361	313	282	305	300	291	297	323	292	312
	15	292	304	355	372	362	396	385	393	384	371	361	363
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	258	286	319	363	335	361	326	335	303	284	279	264
	18	265	298	329	405	390	362	374	401	373	370	374	382
	19	285	282	301	325	433	389	373	383	388	358	369	399
	20	248	263	258	279	263	273	270	302	305	298	300	302
	21	292	294	308	318	322	348	351	378	385	394	343	321
	22	433	485	457	479	505	527	513	476	506	512	480	452
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	417	413	446	447	458	474	472	501	529	509	504	504
	25	351	382	416	470	459	469	424	470	456	452	424	449
	26	480	491	498	505	505	539	576	565	562	582	598	591
	27	283	245	322	312	333	346	342	322	302	317	319	356
	28	323	339	367	360	421	454	516	485	489	464	444	477
	29	388	364	369	446	409	418	399	423	452	503	444	521
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	320	310	311	306	290	288	283	281	279	277	279	279
Hourly Means	298	308	328	340	345	353	350	354	356	355	347	362	



HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hour of Mean Longitude Time	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Time	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JUNE.	1	97	97	100	96	96	91	87	85	91	86	92
	2	87	85	82	76	72	72	69	82	81	81	79
	3	96	91	89	88	86	83	83	81	81	83	82
	4	90	89	83	79	74	66	52	66	61	61	65
	5	85	79	75	73	67	63	60	75	76	73	52
	6	—	—	—	—	—	—	—	—	—	—	—
	7	80	74	69	69	66	63	62	60	54	60	66
	8	81	76	75	74	75	79	81	78	77	78	79
	9	97	96	91	87	85	85	81	81	80	79	71
	10	92	91	91	96	96	94	94	91	95	96	96
	11	95	92	88	90	83	81	91	85	88	94	95
	12	84	75	83	80	72	77	70	67	67	67	67
	13	—	—	—	—	—	—	—	—	—	—	—
	14	91	86	79	90	84	79	78	89	83	74	69
	15	85	86	79	75	75	71	74	73	73	67	61
	16	81	71	65	61	62	61	61	65	61	66	63
	17	89	72	71	79	75	75	75	77	66	64	54
	18	87	77	72	70	70	65	67	77	67	65	68
	19	96	95	95	97	97	95	96	90	82	81	78
	20	—	—	—	—	—	—	—	—	—	—	—
	21	84	82	82	85	81	79	76	76	89	88	83
	22	95	94	94	87	87	86	84	81	87	87	89
	23	87	74	74	77	83	79	81	79	77	72	72
	24	89	81	81	74	76	80	72	62	64	70	66
	25	86	84	84	74	71	62	66	61	61	63	65
	26	89	74	77	77	77	75	78	75	78	71	77
	27	—	—	—	—	—	—	—	—	—	—	—
	28	82	74	67	59	59	61	63	70	46	43	46
	29	71	67	66	63	60	56	58	57	57	76	71
	30	72	67	67	63	61	61	65	69	67	69	69
Hourly Mean	86	83	80	79	77	75	74	75	73	71	72	72
Tension of the Vapour. JUNE.	1	In. '297	In. '297	In. '332	In. '378	In. '415	In. '475	In. '474	In. '444	In. '438	In. '402	In. '411
	2	'339	'336	'340	'334	'359	'369	'381	'445	'407	'407	'399
	3	'325	'305	'399	'396	'398	'415	'454	'450	'404	'410	'391
	4	'375	'301	'403	'370	'358	'354	'286	'331	'298	'286	'274
	5	'225	'232	'359	'262	'273	'286	'299	'370	'381	'391	'299
	6	—	—	—	—	—	—	—	—	—	—	—
	7	'294	'332	'376	'411	'391	'403	'412	'425	'419	'427	'401
	8	'343	'326	'324	'337	'379	'383	'382	'379	'406	'421	'408
	9	'432	'462	'498	'542	'543	'559	'573	'630	'649	'639	'632
	10	'521	'522	'540	'553	'540	'529	'541	'537	'572	'534	'538
	11	'455	'489	'526	'568	'504	'533	'505	'510	'462	'471	'459
	12	'288	'293	'385	'402	'376	'393	'382	'399	'401	'408	'427
	13	—	—	—	—	—	—	—	—	—	—	—
	14	'399	'375	'300	'326	'296	'277	'258	'259	'239	'248	'231
	15	'205	'211	'214	'217	'232	'241	'250	'275	'300	'313	'309
	16	'232	'247	'246	'256	'262	'275	'277	'275	'259	'290	'288
	17	'296	'282	'327	'393	'382	'387	'408	'409	'378	'389	'364
	18	'301	'340	'340	'367	'371	'388	'410	'472	'396	'378	'377
	19	'416	'418	'450	'489	'527	'517	'508	'498	'426	'451	'477
	20	—	—	—	—	—	—	—	—	—	—	—
	21	'375	'409	'461	'491	'488	'481	'492	'488	'442	'490	'520
	22	'378	'398	'377	'435	'470	'530	'538	'545	'529	'486	'469
	23	'400	'435	'439	'507	'528	'557	'561	'559	'543	'541	'529
	24	'409	'476	'512	'537	'570	'626	'548	'478	'505	'568	'536
	25	'409	'487	'479	'504	'483	'455	'495	'496	'497	'535	'513
	26	'509	'523	'605	'614	'655	'697	'677	'661	'639	'648	'631
	27	—	—	—	—	—	—	—	—	—	—	—
	28	'444	'437	'377	'376	'391	'397	'452	'549	'375	'360	'380
	29	'355	'371	'366	'393	'401	'414	'401	'421	'450	'506	'505
	30	'350	'398	'455	'461	'474	'453	'495	'521	'516	'502	'500
Hourly Mean	'361	'380	'401	'421	'426	'438	'441	'455	'436	'443	'433	'422

UR.

9	10	11
3	4	5
91	86	92
81	79	77
83	82	81
61	65	65
73	52	51
—	—	—
69	66	61
78	79	82
79	71	75
96	96	96
94	95	77
67	67	67
—	—	—
71	69	68
67	61	63
66	63	65
64	54	52
65	68	82
81	78	78
—	—	—
48	83	79
47	89	81
72	72	77
70	66	61
63	65	62
71	77	73
—	—	—
43	46	39
76	74	77
69	69	70
—	—	—
71	72	72

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
89	94	95	92	87	86	88	88	89	90	90	88	91
78	81	86	89	90	96	95	98	96	96	97	95	85
84	82	86	89	92	95	96	93	96	94	93	92	89
64	64	64	77	76	77	81	83	80	84	81	82	74
56	59	67	72	84	89	—	—	—	—	—	—	74
—	—	—	—	—	—	71	73	91	95	98	92	74
65	70	76	76	77	81	83	83	84	87	89	89	73
83	80	84	78	82	86	93	92	93	96	97	96	83
74	75	82	86	88	90	89	91	93	92	93	93	86
96	96	97	97	98	97	98	96	97	97	98	97	96
74	81	85	81	82	82	82	79	80	81	80	85	85
70	73	80	81	81	82	—	—	—	—	—	—	80
—	—	—	—	—	—	94	94	96	94	96	96	80
73	74	76	71	72	71	72	72	71	71	76	81	77
65	67	73	77	80	84	78	77	78	83	82	76	75
70	70	70	85	91	89	88	87	88	88	90	93	75
53	70	75	82	86	84	87	89	85	86	76	77	75
87	93	96	97	96	96	96	96	96	96	96	96	83
78	87	87	93	94	95	—	—	—	—	—	—	—
—	—	—	—	—	—	94	94	91	88	90	93	90
79	88	92	90	94	92	94	93	94	86	95	91	87
83	86	91	91	89	91	87	87	88	90	90	90	88
77	80	89	92	92	92	92	80	84	81	91	92	85
61	74	76	78	78	81	84	89	90	87	90	86	78
71	81	92	78	80	91	91	91	91	92	92	92	78
78	84	87	84	92	88	—	—	—	—	—	—	78
—	—	—	—	—	—	91	82	61	66	64	76	78
62	61	55	57	55	59	61	62	62	65	96	71	62
33	59	60	58	66	66	61	71	65	72	72	72	66
70	77	73	80	79	71	73	76	82	83	81	75	72
—	—	—	—	—	—	—	—	—	—	—	—	—
73	77	81	82	81	85	85	85	86	87	88	87	80

In.	In.	In.
402	411	432
407	399	409
410	391	371
286	274	263
391	299	306
—	—	—
427	401	355
424	408	380
639	632	579
534	538	519
471	459	349
408	427	421
—	—	—
248	214	231
313	309	301
290	288	293
389	364	310
378	377	408
451	477	505
—	—	—
490	520	508
486	460	470
541	529	502
568	536	535
535	513	419
648	631	626
—	—	—
360	380	426
506	505	516
502	500	485
—	—	—
443	433	422

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
410	416	396	377	362	344	342	324	322	316	336	337	378
398	368	361	332	349	327	316	306	289	288	278	282	352
378	360	363	371	356	366	379	372	388	386	377	373	387
262	249	233	250	234	230	224	221	192	191	180	178	276
293	303	291	282	279	270	—	—	—	—	—	—	—
—	—	—	—	—	—	262	262	278	278	265	258	292
331	327	339	335	327	349	313	313	313	317	354	360	364
380	370	376	364	386	387	400	398	421	390	386	384	380
580	592	569	519	537	565	547	518	511	505	488	481	548
515	495	503	479	471	468	496	506	496	496	448	440	511
312	303	316	295	296	301	298	289	288	288	264	271	330
425	390	357	354	350	340	—	—	—	—	—	—	—
—	—	—	—	—	—	359	359	356	354	358	356	372
241	247	223	196	189	184	186	183	182	182	187	196	243
302	285	277	267	262	265	255	251	256	251	248	229	259
302	303	303	273	278	270	259	256	251	249	246	250	268
389	375	316	299	280	270	263	257	258	258	245	256	291
410	425	444	461	454	462	461	450	431	433	429	429	409
497	406	381	368	351	349	—	—	—	—	—	—	—
—	—	—	—	—	—	377	359	357	342	347	349	424
490	477	426	406	443	406	397	369	351	334	331	359	438
467	442	421	407	402	394	381	381	377	378	326	346	431
506	475	463	453	439	440	397	346	333	318	339	344	456
519	515	501	400	376	375	368	365	360	355	393	369	467
477	463	481	442	442	463	478	494	486	483	481	455	473
581	568	570	576	568	520	—	—	—	—	—	—	—
—	—	—	—	—	—	613	539	380	383	370	414	507
426	410	338	344	318	336	333	326	317	323	373	340	381
383	386	341	311	335	327	298	306	293	310	305	312	316
466	449	384	374	352	321	313	198	300	294	287	284	406
—	—	—	—	—	—	—	—	—	—	—	—	—
411	400	384	366	361	359	359	348	342	335	332	333	391

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hour of Morning Göttingen Time.	Humidity of the Air.											
	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Evening Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
1	63	65	62	61	69	65	66	61	57	53	53	56
2	84	74	63	63	64	66	63	61	61	60	59	61
3	83	76	77	68	61	61	53	56	58	57	59	67
4	—	—	—	—	—	—	—	—	—	—	—	—
5	90	76	68	70	64	63	65	61	60	62	55	79
6	76	86	87	82	79	77	72	70	85	83	86	77
7	88	83	81	71	70	74	69	69	67	68	65	71
8	89	87	77	77	68	71	72	72	76	74	72	74
9	88	81	78	75	72	71	68	68	71	69	69	67
10	79	85	79	76	76	76	70	66	60	60	59	61
11	—	—	—	—	—	—	—	—	—	—	—	—
12	89	82	81	82	81	79	75	85	81	74	65	72
13	72	74	73	74	63	60	60	58	62	63	60	63
14	73	64	58	50	47	49	47	52	54	51	57	57
15	91	87	80	72	72	69	69	68	65	64	70	72
16	88	80	75	69	67	64	59	61	71	60	66	70
17	90	86	85	76	69	68	67	65	68	89	89	87
18	—	—	—	—	—	—	—	—	—	—	—	—
19	92	84	84	82	77	70	69	69	71	70	66	66
20	90	84	78	81	81	82	81	89	86	81	86	82
21	98	97	91	92	86	79	75	79	75	76	71	76
22	92	74	75	61	58	55	55	58	48	50	50	50
23	87	84	80	76	75	73	71	66	67	65	66	69
24	92	89	87	83	81	87	89	90	84	85	82	80
25	—	—	—	—	—	—	—	—	—	—	—	—
26	91	92	86	76	81	76	75	78	56	56	54	48
27	78	72	66	64	66	64	66	69	64	64	62	67
28	85	77	64	64	73	66	63	67	62	61	62	58
29	88	84	79	75	72	70	69	69	74	81	74	76
30	95	91	88	89	79	81	78	90	92	87	83	82
31	95	90	79	79	76	76	71	76	72	71	65	63
Aug. 1	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	86	82	77	74	72	70	68	69	69	68	67	69
Hour of Morning Göttingen Time.	Tension of the Vapour.											
	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Evening Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
1	In.	mc.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2	290	340	373	434	540	510	510	537	511	454	452	374
3	283	327	449	535	546	544	555	576	570	571	579	588
4	337	499	614	598	613	605	561	588	608	590	613	637
5	—	—	—	—	—	—	—	—	—	—	—	—
6	480	465	519	642	633	614	646	632	625	647	549	568
7	493	561	562	571	582	614	620	665	762	734	820	632
8	532	546	562	620	631	693	683	683	689	700	668	726
9	585	610	681	742	669	725	725	726	760	687	661	687
10	575	625	676	695	683	758	693	698	695	677	629	690
11	546	597	598	618	634	664	626	612	630	606	594	589
12	—	—	—	—	—	—	—	—	—	—	—	—
13	607	682	708	730	748	774	734	832	841	786	740	701
14	554	636	615	749	676	657	662	643	641	576	548	514
15	349	343	352	347	342	384	377	428	419	386	413	441
16	383	420	457	445	525	545	584	598	580	585	591	550
17	535	579	611	622	657	657	636	670	667	644	657	629
18	638	614	659	707	744	745	772	729	776	749	792	800
19	—	—	—	—	—	—	—	—	—	—	—	—
20	603	762	829	814	836	843	856	802	756	812	791	773
21	665	748	742	750	788	745	785	749	796	818	758	732
22	671	733	702	724	762	774	743	765	784	735	743	707
23	649	566	569	501	484	473	502	544	462	473	469	469
24	352	317	482	526	525	529	522	492	477	510	544	545
25	443	496	557	569	548	566	570	661	567	597	568	533
26	—	—	—	—	—	—	—	—	—	—	—	—
27	421	407	375	331	345	335	332	384	363	392	363	271
28	287	303	314	342	354	359	381	389	357	357	371	399
29	309	347	353	376	439	394	363	414	375	368	379	348
30	411	455	469	483	487	503	502	492	511	577	509	505
31	414	452	454	456	498	471	469	491	526	529	515	514
Aug. 1	354	460	470	495	509	510	523	490	478	472	469	469
Hourly Means	480	524	546	572	578	592	591	604	595	590	579	569



UR.

9	10	11
3	4	5
53	53	56
60	59	61
57	59	67
—	—	—
62	55	79
83	86	77
68	65	74
74	72	74
69	69	67
60	59	61
—	—	—
74	65	—
63	60	63
51	57	57
64	70	70
60	66	69
89	89	87
—	—	—
70	66	66
81	86	82
76	71	76
50	50	50
65	66	69
85	82	80
—	—	—
56	54	48
61	62	67
81	74	76
87	83	82
71	65	65
—	—	—
68	67	69
In.	In.	In.
*454	*452	*471
*571	*579	*588
*590	*613	*657
—	—	—
*617	*519	*568
*734	*820	*652
*700	*668	*726
*687	*661	*687
*677	*629	*600
*606	*594	*580
—	—	—
*786	*710	*701
*576	*548	*511
*386	*413	*411
*585	*391	*500
*641	*657	*639
*749	*792	*803
—	—	—
*812	*791	*775
*818	*758	*732
*735	*713	*707
*473	*469	*469
*510	*544	*545
*597	*568	*533
—	—	—
*302	*303	*271
*357	*371	*399
*368	*379	*348
*577	*509	*505
*529	*515	*511
*472	*469	*469
—	—	—
*590	*579	*569

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
54	63	75	72	71	67	63	66	66	72	81	83	65
69	72	76	77	76	80	86	86	91	91	89	90	73
68	73	86	83	83	81	—	—	—	—	—	—	—
—	—	—	—	—	—	81	82	82	88	89	92	74
80	81	92	89	89	76	77	82	75	77	75	75	74
84	85	87	92	94	94	93	94	94	91	88	87	85
71	77	89	90	92	89	90	91	93	94	93	93	81
72	84	85	84	78	83	81	81	81	84	84	84	79
71	75	78	75	78	77	77	79	83	85	84	82	76
69	70	73	74	74	75	—	—	—	—	—	—	—
—	—	—	—	—	—	96	94	96	96	94	96	77
74	74	85	90	89	89	87	88	92	92	84	72	82
64	64	67	72	75	78	79	78	74	73	74	74	69
67	76	80	84	80	80	86	87	86	88	92	92	69
81	85	87	88	88	89	89	94	92	90	92	92	81
70	80	81	87	89	90	89	92	92	92	94	93	78
93	95	94	96	96	97	—	—	—	—	—	—	86
—	—	—	—	—	—	92	89	92	96	96	97	—
66	66	72	75	81	86	89	92	92	92	92	92	79
92	94	98	97	97	97	97	98	96	97	97	97	90
77	80	83	85	90	94	90	94	96	97	89	94	86
51	58	64	80	77	79	90	90	91	91	94	95	70
66	74	88	91	89	92	92	92	92	91	94	94	81
81	83	87	87	87	88	—	—	—	—	—	—	87
—	—	—	—	—	—	97	93	92	90	87	84	—
55	59	76	75	84	84	84	82	80	83	88	69	75
69	77	86	90	91	90	91	91	92	94	100	93	78
55	69	77	84	86	90	90	92	92	93	95	96	76
75	74	73	86	91	95	96	92	90	95	95	96	82
85	91	94	95	95	93	93	96	100	97	95	95	90
78	75	82	92	93	94	—	—	—	—	—	—	82
—	—	—	—	—	—	86	86	87	90	92	94	—
72	76	82	85	86	86	87	88	88	90	90	89	79
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*444	*443	*425	*376	*349	*334	*319	*319	*333	*341	*351	*338	*409
*617	*528	*488	*456	*434	*335	*418	*410	*410	*405	*377	*382	*484
*634	*401	*552	*460	*421	*409	—	—	—	—	—	—	—
—	—	—	—	—	—	*415	*409	*400	*408	*407	*415	*509
*584	*580	*611	*588	*573	*518	*529	*520	*494	*499	*487	*483	*562
*643	*622	*562	*553	*510	*535	*515	*519	*501	*509	*489	*493	*581
*647	*638	*602	*573	*564	*551	*567	*549	*511	*508	*524	*524	*604
*657	*707	*612	*595	*561	*576	*568	*553	*551	*533	*521	*527	*634
*618	*614	*582	*570	*563	*541	*549	*546	*575	*577	*563	*561	*619
*599	*557	*577	*570	*570	*561	—	—	—	—	—	—	—
—	—	—	—	—	—	*620	*600	*582	*582	*575	*574	*596
*746	*713	*682	*649	*609	*607	*606	*597	*593	*528	*512	*523	*676
497	440	421	416	408	405	401	386	356	342	330	325	507
464	442	409	389	356	343	338	337	329	327	355	348	374
589	589	585	588	593	559	556	485	482	463	460	456	528
393	669	603	600	603	597	599	611	610	578	579	601	617
851	863	769	751	761	757	—	—	—	—	—	—	—
—	—	—	—	—	—	*658	*599	*636	*620	*610	*615	*718
*747	*644	*610	*592	*602	*628	*612	*616	*618	*622	*621	*612	*713
*705	*703	*692	*697	*697	*687	*683	*673	*647	*671	*648	*649	*714
*661	*628	*608	*573	*587	*579	*579	*594	*590	*617	*606	*635	*669
440	428	417	443	393	375	377	352	346	333	319	321	446
525	494	441	421	408	400	401	401	392	378	377	383	456
527	522	573	533	544	553	—	—	—	—	—	—	552
—	—	—	—	—	—	588	629	633	593	460	415	—
280	281	317	292	287	269	267	263	253	256	248	220	306
401	390	358	343	336	308	303	307	294	297	298	281	339
395	364	359	344	341	315	345	359	359	345	332	326	358
498	479	465	493	525	513	498	455	439	415	407	403	479
520	506	475	474	447	424	413	378	394	348	322	321	450
417	378	434	431	410	394	—	—	—	—	—	—	—
—	—	—	—	—	—	377	372	364	346	341	344	428
564	542	528	510	499	485	487	476	470	461	449	447	531

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. AUGUST.	2	93	89	74	78	72	70	68	70	69	65	73
	3	87	78	68	69	65	63	65	63	61	58	64
	4	84	77	78	75	68	68	66	64	63	61	60
	5	81	77	77	80	77	69	71	71	65	61	66
	6	87	79	66	66	67	67	68	68	61	69	64
	7	79	77	70	66	71	70	68	69	70	67	77
	8	—	—	—	—	—	—	—	—	—	—	—
	9	96	96	97	94	93	89	86	84	83	82	81
	10	97	97	97	90	86	82	79	80	78	77	81
	11	98	97	92	96	94	98	91	88	88	92	88
	12	97	94	97	84	81	80	78	82	79	79	75
	13	96	93	67	65	82	83	73	73	74	78	79
	14	97	97	92	87	84	85	83	81	86	82	84
	15	—	—	—	—	—	—	—	—	—	—	—
	16	96	91	85	76	67	75	75	74	67	65	71
	17	97	94	93	90	89	92	96	91	82	92	91
	18	85	89	79	71	65	61	56	60	53	55	55
	19	91	84	76	61	58	53	51	48	50	49	48
	20	87	81	83	66	63	73	64	57	58	69	69
	21	74	70	71	64	52	49	47	46	45	45	41
	22	—	—	—	—	—	—	—	—	—	—	—
	23	83	78	72	69	70	74	75	77	78	84	77
	24	88	86	81	82	73	67	69	66	62	59	59
	25	79	82	78	75	74	75	67	65	64	60	61
	26	94	92	89	83	83	85	80	79	75	75	71
	27	91	88	78	78	69	65	61	60	69	76	74
	28	93	87	82	84	78	67	68	61	62	62	67
	29	—	—	—	—	—	—	—	—	—	—	—
	30	96	92	88	83	76	75	69	70	70	72	72
	31	95	91	85	71	72	67	67	64	63	68	74
	Hourly Means	90	87	81	77	74	73	71	70	68	69	70
Tension of the Vapour. AUGUST.	2	.359	.439	.447	.491	.498	.512	.507	.539	.502	.512	.562
	3	.373	.342	.424	.484	.465	.455	.462	.447	.447	.447	.501
	4	.419	.472	.551	.534	.500	.532	.531	.519	.548	.558	.535
	5	.437	.472	.532	.585	.574	.536	.555	.559	.541	.490	.514
	6	.486	.490	.494	.536	.618	.613	.620	.605	.568	.615	.542
	7	.391	.387	.408	.425	.481	.544	.539	.540	.519	.498	.545
	8	—	—	—	—	—	—	—	—	—	—	—
	9	.540	.549	.565	.587	.592	.607	.633	.663	.661	.679	.654
	10	.577	.610	.638	.677	.719	.716	.699	.709	.712	.675	.685
	11	.612	.625	.650	.643	.642	.698	.694	.698	.648	.591	.606
	12	.449	.469	.561	.602	.674	.668	.662	.682	.673	.664	.574
	13	.549	.592	.622	.606	.669	.684	.634	.623	.670	.635	.646
	14	.610	.663	.689	.712	.762	.759	.770	.790	.743	.783	.735
	15	—	—	—	—	—	—	—	—	—	—	—
	16	.634	.674	.683	.671	.625	.759	.747	.745	.709	.705	.650
	17	.579	.727	.745	.748	.763	.707	.741	.670	.669	.682	.656
	18	.376	.410	.390	.377	.365	.349	.347	.377	.346	.364	.329
	19	.281	.300	.326	.288	.302	.293	.286	.278	.289	.305	.292
	20	.358	.395	.437	.408	.426	.467	.463	.443	.421	.351	.478
	21	.315	.322	.359	.372	.331	.331	.335	.341	.353	.358	.330
	22	—	—	—	—	—	—	—	—	—	—	—
	23	.332	.382	.408	.412	.392	.433	.466	.498	.510	.557	.510
	24	.348	.395	.419	.485	.471	.468	.499	.468	.449	.428	.427
	25	.322	.377	.478	.511	.527	.528	.479	.462	.465	.444	.426
	26	.377	.438	.500	.539	.560	.644	.690	.635	.607	.622	.591
	27	.397	.399	.380	.392	.387	.373	.370	.374	.416	.434	.435
	28	.381	.358	.341	.483	.489	.439	.452	.411	.429	.413	.446
	29	—	—	—	—	—	—	—	—	—	—	—
	30	.463	.543	.546	.580	.569	.572	.541	.557	.544	.523	.490
	31	.347	.375	.382	.324	.348	.333	.346	.346	.340	.381	.394
	Hourly Means	.432	.469	.499	.518	.529	.539	.538	.537	.530	.528	.521

R.

9	10	11
3	4	5
65	73	69
58	64	61
64	60	60
61	66	66
69	64	71
67	77	76
—	—	—
82	81	80
77	81	82
92	88	84
79	75	74
78	79	81
82	84	81
—	—	—
65	71	69
92	91	91
55	55	60
49	48	45
69	69	84
45	41	47
—	—	—
84	77	77
59	59	61
60	61	64
75	71	77
76	74	71
62	67	70
—	—	—
72	72	82
68	74	75
69	70	72

In.	In.	In.
*512	*562	*480
*447	*501	*521
*558	*535	*527
*490	*514	*507
*615	*542	*508
*498	*545	*520
—	—	—
*679	*654	*641
*675	*685	*673
*594	*606	*585
*664	*574	*601
*635	*646	*649
*783	*735	*729
—	—	—
*705	*650	*749
*682	*656	*674
*361	*329	*312
*305	*292	*275
*351	*478	*435
*358	*330	*382
—	—	—
*557	*510	*507
*428	*427	*442
*441	*426	*432
*622	*591	*538
*434	*435	*431
*413	*446	*475
—	—	—
*523	*490	*522
*381	*394	*384
—	—	—
*528	*521	*521

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													Daily and Monthly Means.
12	13	14	15	16	17	18	19	20	21	22	23		
6	7	8	9	10	11	12	13	14	15	16	17		
63	74	82	80	80	76	77	79	81	85	90	94	77	
62	68	82	86	89	91	81	88	91	92	93	91	76	
64	73	86	87	87	87	88	92	91	92	93	93	78	
73	78	81	83	79	81	84	87	91	92	93	94	78	
90	91	83	83	82	82	90	91	95	98	97	96	80	
82	86	83	82	83	84	—	—	—	—	—	—	81	
—	—	—	—	—	—	95	96	95	95	96	95	81	
85	85	90	90	92	94	98	95	98	96	95	96	91	
89	90	89	93	94	96	97	98	97	96	97	98	90	
83	90	92	96	95	96	96	96	97	96	96	96	93	
81	88	91	94	94	96	93	93	93	95	95	96	88	
93	95	96	94	92	93	94	92	95	96	97	97	86	
79	81	89	93	93	97	—	—	—	—	—	—	90	
—	—	—	—	—	—	97	97	96	97	97	98	90	
72	78	85	90	93	94	97	95	96	96	97	97	83	
95	93	93	93	85	88	86	92	92	92	83	84	91	
64	69	73	78	78	84	88	84	86	93	95	98	74	
54	72	76	64	73	72	75	78	84	88	85	88	68	
89	88	84	83	88	91	91	91	90	87	83	78	79	
50	61	76	77	77	81	—	—	—	—	—	—	65	
—	—	—	—	—	—	74	80	81	85	87	86	65	
76	88	91	91	94	93	93	93	88	90	94	95	83	
67	80	78	79	85	86	82	85	81	82	81	84	76	
67	77	81	87	89	92	92	87	89	91	91	91	78	
79	83	84	84	77	85	91	91	96	91	90	86	84	
75	81	91	92	93	95	90	90	92	93	94	92	82	
75	85	87	93	95	94	—	—	—	—	—	—	83	
—	—	—	—	—	—	94	95	95	94	96	97	83	
93	96	97	89	91	88	85	85	84	95	94	95	85	
81	85	91	92	90	91	95	89	94	92	88	89	82	
76	82	86	87	87	89	89	90	91	92	92	92	82	
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
*478	*485	*446	*415	*499	*356	*350	*313	*320	*332	*316	*318	*433	
*501	*477	*449	*401	*377	*381	*366	*363	*357	*356	*346	*346	*421	
*541	*549	*495	*437	*419	*418	*416	*411	*402	*408	*406	*420	*481	
*502	*502	*486	*470	*458	*456	*474	*494	*504	*505	*505	*489	*506	
*320	*538	*533	*523	*527	*520	*574	*559	*531	*515	*468	*441	*540	
*533	*509	*472	*445	*456	*448	—	—	—	—	—	—	491	
—	—	—	—	—	—	*517	*525	*519	*517	*515	*523	491	
*639	*604	*603	*607	*616	*600	*585	*556	*532	*530	*539	*555	*599	
*641	*634	*625	*634	*624	*626	*626	*592	*584	*578	*597	*612	*644	
*608	*567	*543	*521	*500	*493	*480	*476	*478	*480	*450	*442	*573	
*623	*594	*603	*603	*603	*604	*582	*578	*566	*524	*528	*532	*592	
*721	*682	*669	*646	*598	*596	*588	*611	*616	*614	*605	*614	*631	
*665	*657	*641	*630	*611	*617	—	—	—	—	—	—	668	
—	—	—	—	—	—	*607	*589	*579	*561	*556	*567	668	
*744	*678	*639	*626	*601	*591	*589	*567	*572	*563	*574	*544	*652	
*651	*619	*580	*567	*473	*472	*425	*416	*392	*408	*400	*373	*589	
*314	*308	*303	*301	*293	*294	*295	*278	*286	*307	*312	*271	*329	
*318	*366	*341	*277	*316	*312	*329	*322	*327	*317	*317	*334	*308	
*453	*427	*405	*393	*402	*389	*393	*375	*369	*349	*326	*305	*402	
*375	*402	*377	*364	*356	*351	—	—	—	—	—	—	343	
—	—	—	—	—	—	*303	*316	*310	*315	*317	*318	343	
*479	*454	*415	*402	*388	*368	*353	*355	*346	*346	*332	*327	*416	
*464	*429	*380	*364	*360	*365	*354	*355	*336	*339	*318	*329	*404	
*423	*418	*402	*402	*402	*407	*398	*369	*365	*366	*367	*349	*422	
*546	*518	*506	*508	*491	*535	*526	*525	*545	*486	*463	*389	*529	
*439	*395	*436	*408	*389	*376	*357	*347	*322	*301	*309	*315	*384	
*459	*433	*420	*417	*421	*401	—	—	—	—	—	—	423	
—	—	—	—	—	—	*463	*441	*417	*408	*415	*417	423	
*538	*519	*483	*462	*450	*413	*385	*376	*359	*337	*328	*332	*476	
*392	*358	*340	*319	*306	*315	*308	*287	*283	*306	*300	*323	*339	
*523	*490	*483	*462	*450	*413	*385	*376	*359	*337	*328	*332	*476	
*381	*394	*384	—	—	—	—	—	—	—	—	—	339	
—	—	—	—	—	—	—	—	—	—	—	—	—	
*528	*521	*521	—	—	—	—	—	—	—	—	—	—	

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Guttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. SEPTEMBER.	1	89	87	88	82	79	77	79	67	66	69	74	
	2	97	93	90	84	80	77	72	70	73	74	80	
	3	96	97	95	94	84	81	81	70	77	83	78	
	4	86	85	85	87	86	86	88	91	88	88	87	88
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	93	91	84	82	84	86	86	89	77	75	74	75
	7	96	91	84	75	72	72	76	80	83	82	83	85
	8	89	89	87	86	81	78	78	74	80	81	82	92
	9	94	92	90	79	71	65	63	72	73	74	74	77
	10	89	95	76	77	72	70	71	63	67	69	73	74
	11	97	92	91	83	82	76	74	74	71	62	63	67
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	89	85	84	77	76	72	73	74	69	73	73	77
	14	88	86	82	82	80	78	76	77	64	63	72	62
	15	93	88	79	68	66	62	60	57	71	70	69	72
	16	97	95	85	78	74	74	75	76	78	76	76	76
	17	93	89	85	80	83	78	78	77	76	76	73	73
	18	92	94	93	93	91	92	92	92	94	91	84	85
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	91	91	91	89	87	90	90	91	91	91	87	92
	21	94	93	86	82	76	79	73	67	67	64	67	71
	22	95	95	88	74	83	82	81	75	72	70	75	81
	23	98	97	89	87	83	78	79	83	78	74	77	81
	24	89	90	90	89	90	89	86	87	87	90	90	92
	25	87	89	90	86	85	84	82	77	85	87	89	90
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	96	95	95	96	96	95	92	94	84	81	81	84
	28	91	93	86	74	66	62	59	80	64	63	68	76
	29	92	88	80	75	78	71	70	79	76	91	90	89
	30	90	88	85	81	72	68	72	66	69	72	72	79
	Hourly Means	92	91	87	82	80	78	77	78	76	76	77	80
Tension of the Vapour. SEPTEMBER.	1	.334	.342	.392	.400	.435	.445	.454	.467	.419	.411	.424	
	2	.336	.398	.468	.500	.524	.527	.305	.499	.532	.554	.568	
	3	.442	.534	.552	.550	.605	.644	.645	.562	.637	.619	.597	
	4	.378	.377	.374	.290	.592	.398	.402	.416	.412	.420	.417	
	5	—	—	—	—	—	—	—	—	—	—	—	
	6	.321	.343	.371	.449	.471	.488	.485	.507	.476	.489	.455	
	7	.376	.453	.480	.449	.437	.436	.446	.475	.466	.465	.464	
	8	.538	.556	.581	.597	.642	.642	.652	.617	.651	.635	.636	
	9	.537	.330	.334	.393	.307	.295	.290	.369	.376	.379	.378	
	10	.267	.334	.29	.393	.387	.381	.406	.361	.389	.393	.414	
	11	.308	.351	.398	.446	.431	.430	.401	.405	.384	.331	.330	
	12	—	—	—	—	—	—	—	—	—	—	—	
	13	.368	.344	.325	.321	.319	.303	.312	.314	.472	.277	.262	
	14	.260	.260	.257	.265	.270	.261	.262	.265	.253	.251	.284	
	15	.210	.239	.245	.242	.252	.255	.255	.258	.323	.325	.324	
	16	.222	.265	.309	.311	.343	.352	.362	.367	.385	.377	.378	
	17	.336	.334	.378	.401	.441	.431	.424	.418	.394	.399	.379	
	18	.421	.444	.464	.469	.482	.481	.491	.493	.483	.478	.440	
	19	—	—	—	—	—	—	—	—	—	—	—	
	20	.385	.393	.402	.399	.394	.405	.408	.415	.406	.408	.389	
	21	.352	.375	.383	.387	.381	.399	.401	.369	.369	.344	.337	
	22	.279	.315	.342	.323	.410	.405	.400	.372	.359	.346	.379	
	23	.345	.379	.433	.460	.464	.484	.485	.508	.506	.479	.495	
	24	.368	.369	.369	.365	.375	.368	.364	.384	.381	.479	.389	
	25	.297	.307	.320	.337	.360	.376	.403	.349	.390	.387	.384	
	26	—	—	—	—	—	—	—	—	—	—	—	
	27	.452	.470	.482	.495	.528	.555	.576	.593	.557	.555	.558	
	28	.289	.320	.338	.313	.304	.304	.299	.310	.273	.262	.261	
	29	.258	.255	.264	.279	.322	.259	.289	.326	.256	.287	.302	
	30	.217	.234	.251	.275	.279	.271	.301	.277	.261	.273	.283	
	Hourly Means	.334	.359	.379	.385	.414	.407	.405	.411	.416	.409	.405	

JR.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
66	69	74
73	74	80
78	83	78
88	87	88
—	—	—
75	74	75
82	83	85
81	82	92
74	74	77
69	73	74
62	63	67
—	—	—
73	73	77
63	72	62
70	69	72
76	76	76
76	73	73
91	84	85
—	—	—
91	87	92
64	67	71
70	75	81
74	77	81
96	90	92
87	89	90
—	—	—
81	81	81
63	68	76
91	90	89
72	72	79
—	—	—
76	77	80

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
80	88	86	90	90	92	92	92	95	95	95	95	85
80	83	88	95	95	97	97	96	96	96	96	96	87
82	81	81	82	84	89	88	86	85	85	86	87	85
87	87	87	89	89	97	—	—	—	—	—	—	95
—	—	—	—	—	—	90	90	93	91	94	91	88
78	88	92	95	95	96	96	96	96	95	95	94	85
86	84	85	88	86	89	89	88	88	89	89	89	85
94	98	97	99	94	90	90	90	91	93	85	89	88
76	78	83	84	94	95	95	95	94	94	94	97	83
78	91	95	92	94	94	94	95	95	95	94	94	84
73	86	88	89	90	91	—	—	—	—	—	—	84
—	—	—	—	—	—	89	91	94	96	97	93	81
79	80	80	80	80	82	83	85	88	89	94	90	80
62	74	78	83	84	88	87	91	91	94	91	91	80
84	91	89	78	82	85	88	92	93	95	94	95	80
81	91	94	95	94	91	94	95	95	95	96	95	87
75	75	75	79	85	87	90	98	93	92	93	93	83
84	88	91	91	92	91	—	—	—	—	—	—	91
—	—	—	—	—	—	89	89	91	93	92	92	91
93	92	89	90	90	91	91	90	92	91	90	92	91
73	81	84	83	88	89	91	93	94	94	93	94	82
91	93	95	95	97	95	99	96	94	94	96	96	88
87	88	96	98	97	97	94	91	91	89	89	89	88
94	96	94	90	94	93	94	95	95	92	88	88	91
91	92	95	94	94	87	—	—	—	—	—	—	90
—	—	—	—	—	—	97	98	96	98	94	97	88
89	92	91	77	78	75	77	87	89	93	91	91	82
79	83	85	90	92	97	94	94	95	91	91	90	86
85	86	90	89	90	88	88	89	94	90	91	90	80
79	88	88	82	81	80	85	81	81	88	91	88	80
—	—	—	—	—	—	—	—	—	—	—	—	—
82	87	88	88	90	90	91	92	92	92	92	92	85

In.	In.	In.
*411	*424	*451
*554	*568	*561
*619	*597	*478
*420	*417	*425
—	—	—
*489	*455	*556
*465	*464	*475
*635	*636	*679
*379	*378	*379
*393	*414	*413
*331	*330	*341
—	—	—
*277	*262	*268
*251	*284	*233
*325	*324	*337
*377	*378	*361
*399	*379	*366
*478	*440	*428
—	—	—
*408	*389	*418
*344	*337	*337
*346	*379	*389
*479	*495	*502
*479	*389	*392
*387	*384	*390
—	—	—
*555	*558	*542
*262	*261	*282
*287	*302	*503
*273	*283	*298
—	—	—
*409	*405	*408

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*464	*422	*386	*382	*375	*376	*368	*351	*350	*356	*350	*332	*395
*533	*501	*535	*553	*509	*483	*468	*425	*421	*397	*418	*413	*476
*445	*406	*395	*300	*101	*395	*385	*375	*382	*382	*394	*387	*483
*430	*431	*447	*461	*464	*482	—	—	—	—	—	—	*394
—	—	—	—	—	—	*318	*310	*309	*303	*308	*303	—
*445	*417	*427	*433	*430	*405	*405	*385	*376	*360	*356	*354	*426
*457	*457	*452	*492	*498	*501	*503	*506	*502	*510	*513	*521	*472
*626	*614	*603	*612	*452	*387	*384	*369	*375	*374	*323	*312	*536
*372	*360	*374	*334	*334	*313	*290	*276	*275	*269	*266	*270	*326
*400	*372	*353	*336	*330	*320	*318	*319	*311	*303	*294	*297	*351
*357	*335	*324	*327	*326	*325	—	—	—	—	—	—	—
—	—	—	—	—	—	*395	*397	*395	*398	*401	*400	*372
*262	*257	*247	*241	*236	*242	*241	*246	*254	*258	*270	*262	*287
*226	*226	*227	*230	*234	*236	*230	*223	*218	*214	*215	*210	*242
*365	*317	*297	*272	*273	*272	*269	*253	*237	*231	*222	*223	*271
*351	*332	*323	*310	*316	*317	*328	*327	*327	*322	*335	*338	*332
*359	*359	*359	*379	*372	*375	*378	*470	*440	*431	*432	*429	*39.
*417	*453	*457	*446	*445	*450	—	—	—	—	—	—	*440
—	—	—	—	—	—	*378	*378	*389	*392	*387	*387	—
*403	*364	*360	*357	*353	*346	*346	*360	*364	*351	*369	*361	*382
*312	*309	*296	*293	*296	*297	*289	*273	*289	*274	*274	*274	*329
*369	*353	*340	*330	*350	*322	*319	*297	*289	*286	*300	*292	*340
*478	*461	*477	*464	*438	*428	*452	*414	*408	*392	*379	*368	*416
*397	*398	*395	*382	*388	*373	*371	*372	*363	*330	*306	*298	*374
*383	*385	*389	*380	*377	*347	—	—	—	—	—	—	—
—	—	—	—	—	—	*331	*453	*454	*467	*452	*447	*382
*330	*505	*492	*396	*376	*329	*301	*308	*301	*293	*288	*284	*449
*276	*280	*269	*244	*269	*265	*250	*248	*247	*250	*252	*252	*277
*279	*274	*279	*260	*259	*260	*260	*247	*238	*234	*218	*217	*268
*292	*270	*263	*245	*260	*262	*291	*290	*287	*296	*304	*270	*273
—	—	—	—	—	—	—	—	—	—	—	—	—
*393	*380	*376	*368	*360	*350	*341	*341	*338	*334	*331	*327	*374

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean rainy Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. OCTOBER.	1	91	86	77	69	65	64	67	62	64	58	62
	2	91	89	85	69	68	62	59	60	70	72	70
	3	—	—	—	—	—	—	—	—	—	—	—
	4	97	97	96	91	88	86	81	81	80	78	83
	5	96	96	96	92	94	96	89	89	87	84	87
	6	91	92	94	95	95	93	92	91	87	83	84
	7	92	94	93	92	88	88	93	91	95	93	95
	8	96	96	96	94	92	89	89	95	94	96	96
	9	89	90	87	74	73	72	73	85	81	78	81
	10	—	—	—	—	—	—	—	—	—	—	—
	11	74	76	70	57	51	48	43	45	46	48	47
	12	83	85	88	88	85	78	85	82	89	87	90
	13	85	87	81	75	73	70	55	47	47	50	61
	14	88	86	84	72	66	66	61	61	62	60	55
	15	90	86	80	81	72	75	73	75	70	73	70
	16	92	83	83	78	74	71	68	70	71	70	72
	17	—	—	—	—	—	—	—	—	—	—	—
	18	97	84	94	89	87	85	80	77	77	78	78
	19	93	97	94	83	68	58	49	51	47	51	47
	20	96	91	84	76	79	73	67	64	45	42	42
	21	84	79	81	77	68	73	73	73	73	73	73
	22	93	93	93	92	89	87	86	87	87	90	87
	23	97	91	96	94	75	70	81	83	77	80	80
	24	—	—	—	—	—	—	—	—	—	—	—
	25	93	91	92	87	73	62	62	60	62	60	58
	26	82	100	100	74	73	75	71	77	71	70	63
	27	49	47	47	67	61	63	70	65	65	73	64
	28	91	84	78	70	48	65	59	64	66	68	64
	29	84	93	82	84	85	76	77	71	71	73	78
	30	81	94	96	92	88	77	76	75	81	80	84
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	88	88	86	81	76	74	72	72	72	72	72	
Tension of the Vapour. OCTOBER.	1	.264	.266	.263	.243	.235	.248	.261	.247	.249	.236	.239
	2	.216	.236	.269	.257	.273	.259	.247	.255	.307	.319	.295
	3	—	—	—	—	—	—	—	—	—	—	—
	4	.243	.277	.358	.408	.416	.426	.417	.400	.393	.369	.392
	5	.440	.458	.463	.477	.473	.492	.509	.507	.501	.504	.479
	6	.418	.422	.429	.430	.426	.423	.422	.418	.407	.400	.405
	7	.396	.399	.396	.391	.389	.383	.399	.395	.410	.407	.417
	8	.415	.411	.414	.414	.426	.429	.434	.422	.423	.428	.430
	9	.226	.260	.276	.279	.296	.289	.292	.347	.364	.349	.360
	10	—	—	—	—	—	—	—	—	—	—	—
	11	.177	.185	.182	.166	.159	.160	.150	.156	.167	.178	.173
	12	.215	.230	.248	.260	.269	.256	.255	.245	.253	.249	.256
	13	.199	.205	.208	.197	.201	.198	.169	.153	.154	.152	.174
	14	.178	.177	.176	.169	.167	.165	.155	.150	.155	.149	.134
	15	.149	.148	.157	.167	.161	.197	.191	.198	.191	.197	.182
	16	.246	.242	.257	.257	.261	.264	.265	.292	.302	.303	.301
	17	—	—	—	—	—	—	—	—	—	—	—
	18	.230	.223	.283	.314	.358	.379	.409	.415	.411	.408	.397
	19	.244	.247	.269	.278	.237	.218	.199	.199	.194	.204	.176
	20	.151	.162	.190	.221	.255	.251	.238	.239	.186	.173	.164
	21	.167	.165	.186	.200	.194	.216	.214	.207	.205	.209	.208
	22	.210	.211	.210	.208	.209	.206	.201	.208	.213	.224	.222
	23	.200	.192	.212	.243	.221	.229	.280	.283	.265	.277	.272
	24	—	—	—	—	—	—	—	—	—	—	—
	25	.289	.284	.290	.292	.241	.208	.205	.201	.186	.163	.141
	26	.134	.170	.180	.132	.130	.131	.130	.133	.122	.120	.105
	27	.059	.055	.060	.108	.111	.111	.136	.135	.136	.154	.130
	28	.127	.125	.143	.142	.116	.165	.150	.162	.170	.173	.159
	29	.134	.172	.164	.213	.243	.244	.253	.244	.246	.246	.258
	30	.184	.180	.206	.259	.282	.276	.272	.280	.293	.285	.290
	31	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	.227	.235	.250	.259	.260	.263	.264	.265	.266	.264	.260	



HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. NOVEMBER.	1	100	100	98	97	94	94	93	92	93	93	97
	2	98	98	98	96	91	89	86	86	85	85	88
	3	96	96	91	93	94	93	95	95	95	95	96
	4	97	97	94	68	75	79	78	78	76	78	72
	5	90	90	80	79	74	74	67	59	67	59	60
	6	92	94	94	83	82	79	80	80	81	79	79
	7	—	—	—	—	—	—	—	—	—	—	—
	8	98	100	100	93	100	100	92	98	99	98	98
	9	98	97	97	97	95	85	78	81	72	69	64
	10	79	79	77	80	87	68	68	65	65	66	72
	11	78	78	76	76	79	79	75	73	73	71	73
	12	92	88	88	83	80	72	74	70	67	69	72
	13	91	91	91	82	79	73	73	74	81	80	83
	14	—	—	—	—	—	—	—	—	—	—	—
	15	90	86	87	81	80	81	89	78	67	64	67
	16	96	100	98	94	85	86	90	90	86	87	83
	17	80	78	82	84	82	78	69	82	87	76	74
	18	98	100	100	100	100	100	100	100	100	100	100
	19	79	79	81	78	80	80	88	81	73	82	78
	20	100	100	100	92	94	90	85	85	84	84	87
	21	—	—	—	—	—	—	—	—	—	—	—
	22	100	100	100	98	91	91	88	83	82	82	86
	23	98	98	100	100	100	100	96	96	96	96	94
	24	100	100	100	100	100	100	89	91	93	97	100
	25	97	97	100	96	90	90	87	93	95	94	94
	26	98	99	94	92	92	91	92	94	94	90	87
	27	91	91	89	88	98	90	93	84	90	94	96
	28	—	—	—	—	—	—	—	—	—	—	—
	29	100	100	100	100	100	100	100	100	100	100	100
	30	97	100	94	94	92	89	89	87	86	77	73
	Hourly Means	94	94	93	90	89	87	85	84	84	83	83
Tension of the Vapour. NOVEMBER.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	1	.327	.333	.339	.350	.365	.377	.398	.394	.397	.369	.352
	2	.348	.348	.358	.367	.372	.386	.385	.410	.379	.372	.349
	3	.296	.298	.367	.380	.375	.366	.395	.395	.401	.391	.393
	4	.256	.252	.281	.233	.258	.299	.291	.288	.279	.269	.253
	5	.188	.187	.188	.196	.202	.206	.193	.182	.193	.171	.170
	6	.163	.154	.172	.172	.178	.179	.179	.179	.181	.181	.184
	7	—	—	—	—	—	—	—	—	—	—	—
	8	.292	.300	.305	.292	.305	.311	.312	.328	.329	.328	.330
	9	.360	.359	.385	.396	.410	.345	.303	.293	.267	.262	.267
	10	.174	.176	.175	.187	.202	.163	.166	.160	.158	.159	.158
	11	.161	.165	.161	.165	.172	.175	.169	.166	.166	.161	.164
	12	.163	.152	.159	.179	.183	.172	.177	.172	.161	.169	.168
	13	.180	.176	.181	.183	.183	.176	.183	.191	.205	.195	.197
	14	—	—	—	—	—	—	—	—	—	—	—
	15	.206	.202	.204	.208	.204	.208	.219	.196	.174	.167	.170
	16	.150	.150	.168	.199	.204	.220	.249	.260	.269	.277	.257
	17	.244	.241	.252	.265	.279	.282	.264	.269	.303	.286	.300
	18	.263	.264	.264	.266	.270	.272	.273	.272	.276	.284	.299
	19	.156	.154	.144	.133	.134	.130	.138	.128	.121	.132	.124
	20	.108	.108	.114	.119	.136	.139	.137	.142	.143	.141	.143
	21	—	—	—	—	—	—	—	—	—	—	—
	22	.200	.212	.212	.226	.239	.257	.263	.262	.249	.246	.238
	23	.259	.262	.269	.285	.302	.327	.344	.354	.351	.359	.351
	24	.330	.302	.317	.311	.334	.349	.317	.325	.328	.323	.327
	25	.240	.240	.242	.251	.240	.240	.226	.230	.228	.223	.221
	26	.141	.139	.133	.131	.131	.131	.132	.137	.137	.132	.125
	27	.122	.127	.130	.133	.143	.140	.142	.149	.160	.163	.160
	28	—	—	—	—	—	—	—	—	—	—	—
	29	.073	.073	.074	.075	.078	.085	.085	.086	.091	.093	.086
	30	.102	.104	.110	.118	.119	.121	.123	.124	.126	.115	.103
Hourly Means	.212	.211	.219	.224	.231	.233	.233	.235	.233	.230	.227	



UR.		
9	10	11
3	4	5
93	93	97
85	88	91
95	96	97
78	72	79
58	60	69
79	79	93
—	—	—
98	98	93
69	64	70
66	72	71
71	73	77
69	72	73
80	83	81
—	—	—
64	67	75
87	83	82
76	74	87
100	100	100
82	78	81
84	87	93
—	—	—
82	86	89
96	94	92
97	100	100
94	94	93
90	87	89
94	96	90
—	—	—
100	100	100
77	73	75
83	83	86
In.	In.	In.
*369	*352	*341
*372	*371	*349
*391	*393	*383
*269	*253	*230
*171	*170	*176
*181	*184	*197
—	—	—
*328	*330	*321
*262	*267	*227
*159	*138	*162
*161	*164	*168
*169	*168	*166
*195	*197	*192
—	—	—
*167	*170	*184
*277	*257	*248
*286	*278	*300
*284	*299	*307
*132	*123	*124
*141	*141	*143
—	—	—
*246	*248	*232
*353	*351	*356
*323	*327	*319
*223	*221	*209
*132	*125	*120
*163	*160	*151
—	—	—
*093	*093	*086
*115	*103	*106
*230	*227	*224

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
100	96	98	93	95	97	96	96	97	97	99	100	96
93	95	95	95	95	97	96	95	97	97	98	97	93
97	96	96	97	97	97	89	89	94	94	97	98	94
83	81	76	79	72	61	65	82	88	88	90	90	81
76	79	78	85	79	81	86	89	93	93	93	93	79
96	91	98	97	97	96	—	—	—	—	—	—	90
—	—	—	—	—	—	96	97	95	95	96	96	97
93	98	98	96	95	96	96	97	97	96	97	97	97
66	83	79	62	61	56	61	67	71	71	76	73	76
71	75	77	68	76	86	79	88	82	80	79	78	76
76	71	78	80	89	80	80	80	84	85	79	89	78
75	77	80	85	86	85	85	84	79	79	82	86	80
86	86	88	89	91	95	—	—	—	—	—	—	86
—	—	—	—	—	—	91	91	91	91	91	91	90
81	92	90	92	91	86	85	86	92	91	90	98	85
82	85	87	82	82	79	85	86	87	82	87	78	87
89	88	85	91	91	89	85	88	89	95	97	98	85
100	100	100	99	87	87	88	82	82	83	80	83	95
78	86	86	89	96	95	99	100	100	100	100	100	87
91	95	93	97	96	93	—	—	—	—	—	—	94
—	—	—	—	—	—	98	98	100	100	100	100	93
94	98	96	91	92	91	100	96	91	91	97	97	93
95	91	91	91	93	96	100	100	100	100	100	100	97
91	93	98	99	96	91	95	97	98	98	98	98	97
93	93	98	98	95	91	99	91	91	97	87	90	91
99	100	100	100	100	100	100	100	100	100	91	91	95
90	95	95	92	92	91	—	—	—	—	—	—	91
—	—	—	—	—	—	100	100	100	100	100	100	94
100	100	100	100	101	100	100	100	100	100	100	100	100
84	85	82	86	87	91	81	85	100	100	100	100	89
88	90	90	90	90	89	90	91	92	93	93	93	89
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*318	*321	*338	*351	*333	*310	*338	*356	*338	*337	*316	*319	*350
*338	*332	*314	*369	*356	*350	*311	*338	*311	*353	*317	*312	*359
*325	*357	*370	*383	*381	*314	*338	*305	*282	*277	*265	*253	*347
*290	*218	*205	*185	*181	*160	*159	*185	*177	*177	*183	*191	*238
*176	*172	*164	*173	*168	*173	*176	*177	*178	*174	*172	*168	*180
*180	*158	*159	*161	*161	*157	—	—	—	—	—	—	198
—	—	—	—	—	—	*273	*271	*271	*273	*283	*286	—
*321	*324	*328	*322	*321	*322	*333	*335	*333	*353	*351	*367	*324
*205	*218	*202	*176	*165	*153	*168	*157	*153	*165	*170	*168	*249
*161	*167	*167	*151	*165	*179	*166	*177	*169	*166	*162	*160	*168
*162	*157	*163	*166	*166	*166	*168	*162	*168	*168	*152	*167	*165
*168	*167	*172	*176	*179	*176	*176	*176	*172	*175	*180	*185	*172
*207	*211	*218	*219	*221	*225	—	—	—	—	—	—	—
—	—	—	—	—	—	*216	*211	*211	*205	*203	*205	*200
*190	*201	*196	*191	*180	*166	*166	*165	*230	*157	*153	*159	*186
*214	*258	*260	*242	*242	*261	*265	*262	*262	*263	*260	*238	*238
*289	*284	*275	*293	*286	*278	*265	*270	*267	*274	*277	*268	*276
*391	*302	*302	*339	*286	*269	*263	*225	*216	*238	*177	*176	*266
*119	*127	*121	*127	*122	*125	*124	*122	*121	*116	*116	*109	*128
*116	*163	*165	*171	*166	*158	—	—	—	—	—	—	—
—	—	—	—	—	—	*184	*181	*197	*206	*209	*211	*155
*236	*243	*237	*241	*239	*241	*267	*252	*252	*252	*257	*251	*242
*353	*354	*350	*350	*351	*353	*352	*346	*349	*357	*347	*347	*334
*290	*269	*272	*275	*255	*250	*252	*252	*250	*248	*247	*248	*291
*211	*205	*206	*206	*191	*181	*185	*165	*161	*166	*151	*133	*206
*122	*124	*125	*121	*120	*116	*112	*116	*121	*122	*118	*125	*126
*151	*160	*159	*159	*157	*156	—	—	—	—	—	—	—
—	—	—	—	—	—	*076	*075	*072	*072	*070	*069	*129
*084	*081	*081	*084	*085	*091	*093	*103	*100	*097	*103	*101	*087
*111	*117	*118	*131	*142	*157	*138	*141	*143	*132	*135	*135	*124
*220	*219	*219	*222	*217	*212	*214	*213	*212	*212	*207	*207	*220

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottgen Ther.	0	1	2	3	4	5	6	7	8	9	10	11
Hour of Mean Toronto Ther.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. DECEMBER.	1	100	99	75	68	69	66	68	68	71	62	79
	2	100	100	100	100	94	91	90	89	79	86	91
	3	94	94	95	94	91	91	89	92	91	86	91
	4	100	100	100	97	96	97	100	100	97	92	89
	5	—	—	—	—	—	—	—	—	—	—	—
	6	93	100	93	91	94	94	99	96	95	97	97
	7	91	91	96	74	74	79	79	77	78	78	91
	8	89	88	86	79	81	79	77	78	83	85	85
	9	86	90	92	91	100	100	100	100	100	100	100
	10	100	100	100	100	100	100	82	79	82	83	83
	11	100	100	100	99	97	93	78	73	75	72	81
	12	—	—	—	—	—	—	—	—	—	—	—
	13	99	99	97	99	99	99	96	97	99	99	100
	14	95	95	97	97	97	97	95	97	98	97	97
	15	86	97	79	85	71	79	87	67	70	71	67
	16	94	94	91	91	91	91	91	86	83	83	95
	17	93	98	85	84	63	79	77	86	85	86	87
	18	100	100	100	100	100	100	99	95	99	89	88
	19	—	—	—	—	—	—	—	—	—	—	—
	20	95	93	90	100	100	98	94	91	95	75	84
	21	100	100	98	100	98	98	98	92	92	90	90
	22	95	96	98	100	98	98	90	93	87	87	87
	23	98	100	96	100	93	98	93	93	100	99	88
	24	88	93	93	88	94	82	77	85	79	79	83
	25	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—
	27	98	100	100	100	93	80	92	92	92	92	92
	28	93	95	95	93	86	86	90	99	95	95	95
	29	97	96	93	92	88	81	83	87	86	87	87
	30	90	93	92	92	93	92	95	90	93	95	99
	31	100	100	100	99	95	99	95	97	99	99	99
Hourly Means	95	97	94	93	91	90	89	88	89	87	89	91
Tension of the Vapour. DECEMBER.	1	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
	2	*180	*188	*159	*151	*155	*167	*155	*168	*187	*164	*185
	3	*205	*201	*200	*206	*204	*205	*209	*207	*184	*198	*202
	4	*179	*179	*181	*179	*179	*178	*173	*177	*171	*155	*159
	5	*143	*141	*141	*147	*147	*161	*169	*169	*164	*159	*154
	6	—	—	—	—	—	—	—	—	—	—	—
	7	*137	*147	*137	*149	*163	*158	*174	*176	*182	*180	*180
	8	*169	*169	*174	*156	*166	*183	*179	*184	*190	*191	*208
	9	*191	*186	*191	*192	*214	*225	*230	*238	*250	*250	*246
	10	*193	*198	*191	*199	*214	*223	*230	*234	*243	*263	*269
	11	*320	*307	*308	*309	*321	*316	*288	*278	*288	*255	*243
	12	*194	*198	*201	*201	*206	*199	*164	*162	*167	*161	*172
	13	—	—	—	—	—	—	—	—	—	—	—
	14	*217	*215	*206	*208	*208	*210	*208	*208	*204	*195	*196
	15	*172	*172	*177	*182	*182	*183	*181	*183	*181	*183	*183
	16	*170	*161	*132	*145	*124	*141	*159	*125	*130	*133	*120
	17	*081	*081	*079	*079	*084	*087	*090	*089	*091	*093	*107
	18	*091	*096	*088	*087	*073	*086	*103	*122	*128	*131	*133
	19	*087	*056	*091	*106	*124	*136	*147	*158	*168	*157	*161
	20	—	—	—	—	—	—	—	—	—	—	—
	21	*081	*081	*078	*082	*084	*081	*083	*081	*087	*071	*074
	22	*077	*074	*071	*075	*083	*095	*098	*096	*098	*102	*107
	23	*115	*112	*114	*119	*122	*128	*126	*122	*118	*119	*119
	24	*100	*102	*108	*109	*106	*119	*124	*132	*133	*133	*119
	25	*104	*107	*107	*110	*116	*098	*093	*102	*096	*096	*099
	26	—	—	—	—	—	—	—	—	—	—	—
	27	*183	*081	*078	*081	*088	*080	*099	*096	*100	*103	*102
	28	*157	*165	*166	*174	*170	*171	*177	*189	*186	*190	*190
	29	*215	*219	*214	*221	*230	*220	*230	*234	*231	*232	*234
	30	*237	*234	*233	*252	*259	*265	*285	*282	*283	*275	*275
	31	*269	*265	*267	*269	*280	*297	*285	*285	*292	*285	*285
Hourly Means	*164	*159	*157	*161	*166	*170	*171	*173	*175	*172	*174	*172

\* Christmas Day.

Ull.

9	10	11
3	4	5
62	79	75
86	91	97
86	91	96
92	89	92
—	—	—
97	97	100
78	91	94
85	85	88
100	100	100
83	83	76
72	81	84
—	—	—
99	100	100
97	97	100
71	67	77
83	95	85
86	87	91
89	86	88
—	—	—
75	81	100
90	90	90
87	87	78
99	88	87
79	83	86
—	—	—
92	92	97
95	95	96
87	87	88
95	95	99
99	99	99
—	—	—
87	89	91
—	—	—
In.	In.	In.
*164	*185	*172
*198	*202	*197
*155	*159	*151
*159	*151	*158
—	—	—
*180	*180	*170
*191	*208	*192
*250	*246	*259
*263	*269	*277
*255	*243	*217
*161	*172	*169
—	—	—
*195	*196	*192
*183	*183	*187
*133	*120	*127
*093	*107	*100
*131	*133	*131
*157	*161	*168
—	—	—
*071	*071	*077
*102	*107	*108
*119	*119	*105
*133	*119	*117
*096	*099	*101
—	—	—
*103	*102	*109
*190	*190	*199
*232	*231	*234
*275	*275	*273
*285	*285	*282
—	—	—
*172	*174	*172

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
77	82	82	82	98	97	100	100	100	100	99	100	84
97	97	95	94	91	96	99	95	94	91	91	91	91
92	91	94	91	90	92	93	89	96	100	99	100	93
92	95	95	95	91	91	—	—	—	—	—	—	96
—	—	—	—	—	—	100	100	91	90	92	95	96
92	80	80	95	81	86	82	85	85	80	90	90	91
100	80	100	100	98	99	100	100	95	95	95	86	90
92	93	95	95	95	91	94	81	77	80	79	83	96
100	100	100	100	100	100	100	100	99	100	100	100	98
81	80	76	82	85	82	83	85	91	91	100	100	88
92	90	91	91	97	100	—	—	—	—	—	—	92
—	—	—	—	—	—	100	99	99	99	99	100	98
99	99	99	99	99	99	99	99	99	97	95	95	98
99	98	99	99	99	99	99	95	95	95	94	94	97
79	89	82	78	98	95	98	100	100	91	93	98	85
84	90	89	90	87	87	92	98	91	98	95	92	90
93	76	70	95	88	92	95	100	98	98	69	93	87
89	89	86	81	89	90	—	—	—	—	—	—	95
—	—	—	—	—	—	98	98	98	98	100	93	96
98	100	98	98	98	100	100	100	100	98	98	98	96
88	92	93	100	98	96	96	100	98	91	89	92	95
88	83	75	83	89	92	89	89	92	92	91	91	90
88	88	90	93	88	90	95	92	85	82	86	82	92
87	90	87	92	98	100	—	—	—	—	—	—	90
—	—	—	—	—	—	—	—	—	—	—	—	96
100	97	98	100	98	100	99	97	97	100	95	95	95
99	97	97	89	95	97	97	95	94	97	96	97	95
92	93	93	97	97	97	95	95	92	90	88	91	91
99	99	99	100	99	99	100	100	100	99	99	99	96
99	99	99	100	100	99	99	99	100	99	99	100	99
—	—	—	—	—	—	—	—	—	—	—	—	—
92	91	91	93	91	95	95	96	95	95	93	95	92
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*171	*171	*172	*172	*197	*205	*216	*217	*217	*209	*205	*205	*183
*201	*201	*199	*192	*190	*181	*185	*182	*179	*179	*181	*181	*195
*153	*159	*119	*145	*141	*141	*112	*138	*145	*117	*143	*143	*159
*159	*169	*176	*183	*181	*180	—	—	—	—	—	—	*155
—	—	—	—	—	—	*146	*143	*136	*131	*129	*139	—
*141	*144	*136	*151	*151	*159	*153	*156	*157	*167	*169	*168	*159
*185	*144	*177	*189	*235	*178	*186	*181	*180	*178	*193	*181	*182
*252	*246	*248	*249	*248	*246	*246	*246	*197	*199	*192	*191	*225
*277	*285	*285	*293	*289	*322	*314	*319	*291	*293	*308	*311	*264
*214	*206	*197	*204	*202	*193	*193	*193	*196	*187	*192	*191	*243
*154	*142	*143	*145	*145	*156	—	—	—	—	—	—	—
—	—	—	—	—	—	*242	*235	*235	*235	*234	*234	*187
*187	*186	*179	*179	*172	*172	*170	*170	*170	*170	*167	*170	*190
*185	*183	*185	*185	*183	*185	*185	*181	*180	*181	*163	*174	*181
*126	*133	*117	*099	*111	*104	*102	*099	*091	*080	*079	*081	*121
*069	*108	*103	*103	*101	*097	*099	*101	*098	*090	*087	*089	*093
*133	*103	*103	*117	*103	*099	*101	*099	*091	*089	*075	*090	*103
*172	*171	*163	*163	*159	*171	—	—	—	—	—	—	—
—	—	—	—	—	—	*106	*105	*103	*102	*099	*090	*132
*075	*073	*070	*075	*075	*077	*077	*076	*074	*073	*072	*069	*077
*105	*119	*120	*130	*129	*128	*129	*136	*131	*117	*110	*111	*106
*104	*093	*082	*088	*091	*099	*091	*089	*093	*093	*095	*095	*105
*118	*118	*121	*125	*119	*121	*121	*119	*110	*110	*113	*105	*116
*102	*103	*097	*101	*101	*105	—	—	—	—	—	—	—
—	—	—	—	—	—	*075	*075	*078	*080	*081	*081	*096
—	—	—	—	—	—	*137	*139	*139	*149	*149	*153	*116
*111	*106	*106	*122	*127	*136	*137	*139	*139	*149	*149	*153	*116
*199	*200	*200	*190	*197	*201	*206	*203	*205	*208	*208	*213	*190
*235	*234	*228	*229	*227	*227	*231	*236	*233	*237	*236	*236	*229
*269	*273	*273	*265	*264	*260	*260	*260	*260	*255	*249	*264	*263
*275	*269	*266	*267	*278	*275	*285	*292	*297	*305	*305	*308	*283
—	—	—	—	—	—	—	—	—	—	—	—	—
*169	*167	*166	*167	*170	*170	*169	*168	*165	*164	*163	*165	*167

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Guthrie's Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JANUARY.	1	100	99	100	100	100	99	100	99	97	93	93
	2	—	—	—	—	—	—	—	—	—	—	—
	3	95	95	94	87	87	85	85	83	81	81	79
	4	91	93	93	77	85	92	82	78	88	93	98
	5	98	99	97	99	99	100	99	87	90	88	97
	6	100	98	100	98	98	98	100	98	100	100	100
	7	100	98	98	94	100	98	98	100	100	98	98
	8	100	97	97	90	95	95	95	95	99	80	82
	9	—	—	—	—	—	—	—	—	—	—	—
	10	97	96	100	100	100	100	100	100	100	100	100
	11	100	100	94	95	94	95	95	94	91	97	98
	12	100	100	100	100	100	100	95	98	94	96	90
	13	84	83	97	80	78	85	93	89	88	92	93
	14	100	100	100	100	100	100	100	100	100	100	100
	15	100	100	100	99	100	100	100	100	100	98	87
	16	—	—	—	—	—	—	—	—	—	—	—
	17	81	81	86	90	89	73	73	83	69	70	82
	18	69	100	61	80	84	82	82	76	82	71	76
	19	100	100	100	100	100	95	92	92	92	83	87
	20	78	78	79	74	74	64	64	75	68	71	79
	21	79	80	80	72	72	60	51	48	50	63	62
	22	98	100	94	89	90	87	79	81	77	77	77
	23	—	—	—	—	—	—	—	—	—	—	—
	24	100	100	100	92	80	80	83	82	81	81	87
	25	100	98	100	93	74	82	87	86	82	84	86
	26	95	97	96	94	98	99	100	100	100	100	100
	27	99	100	100	100	100	100	98	100	99	100	99
	28	81	80	80	83	78	81	80	80	80	82	99
	29	96	96	73	92	76	75	74	74	75	72	83
	30	—	—	—	—	—	—	—	—	—	—	—
	31	99	97	100	90	98	93	97	97	98	96	70
Hourly Means	94	95	94	92	90	89	89	88	88	87	88	
Tension of the Vapour. JANUARY.	1	.308	.318	.311	.219	.314	.324	.332	.332	.343	.329	.348
	2	—	—	—	—	—	—	—	—	—	—	—
	3	.178	.178	.176	.180	.184	.186	.187	.190	.187	.193	.179
	4	.181	.195	.180	.131	.145	.146	.127	.117	.128	.133	.130
	5	.131	.139	.142	.149	.152	.163	.177	.174	.179	.192	.176
	6	.080	.076	.075	.075	.075	.079	.084	.085	.085	.087	.087
	7	.085	.089	.088	.091	.094	.098	.105	.111	.112	.114	.110
	8	.176	.170	.168	.170	.167	.172	.174	.182	.173	.150	.150
	9	—	—	—	—	—	—	—	—	—	—	—
	10	.029	.027	.029	.032	.036	.041	.044	.044	.049	.049	.049
	11	.072	.072	.060	.091	.096	.105	.107	.109	.113	.121	.119
	12	.080	.070	.068	.089	.107	.116	.130	.135	.136	.134	.147
	13	.119	.163	.182	.163	.176	.179	.204	.194	.194	.203	.203
	14	.216	.217	.221	.223	.223	.227	.227	.230	.231	.231	.231
	15	.245	.243	.255	.253	.272	.281	.292	.289	.294	.316	.279
	16	—	—	—	—	—	—	—	—	—	—	—
	17	.147	.143	.122	.123	.146	.097	.098	.145	.097	.102	.115
	18	.117	.139	.084	.113	.102	.097	.098	.089	.093	.084	.087
	19	.062	.032	.063	.072	.085	.085	.093	.095	.103	.104	.106
	20	.129	.132	.133	.143	.157	.143	.149	.177	.171	.186	.188
	21	.183	.183	.183	.181	.201	.184	.153	.140	.131	.144	.122
	22	.090	.092	.093	.093	.100	.110	.111	.118	.118	.127	.125
	23	—	—	—	—	—	—	—	—	—	—	—
	24	.121	.116	.118	.136	.133	.138	.146	.144	.151	.151	.157
	25	.159	.151	.164	.177	.156	.185	.195	.197	.200	.205	.198
	26	.216	.218	.218	.224	.224	.225	.230	.234	.240	.245	.247
	27	.225	.223	.224	.226	.246	.256	.262	.258	.244	.247	.236
	28	.149	.144	.143	.147	.151	.163	.163	.166	.166	.167	.187
	29	.139	.157	.137	.162	.134	.131	.130	.132	.137	.132	.149
	30	—	—	—	—	—	—	—	—	—	—	—
	31	.187	.188	.199	.207	.298	.241	.245	.249	.222	.229	.166
Hourly Means	.148	.150	.149	.153	.156	.159	.163	.164	.165	.168	.164	

TH.		
9	10	11
3	4	5
97	93	93
81	79	85
93	98	100
88	87	84
100	100	100
98	98	98
80	82	86
—	—	—
100	100	41
97	98	100
90	85	98
92	93	95
100	100	100
98	87	81
—	—	—
70	82	85
71	76	86
83	87	100
71	79	85
63	62	79
77	77	91
—	—	—
81	87	86
81	86	90
100	100	100
100	59	100
82	99	59
72	83	81
—	—	—
96	70	59
—	—	—
87	88	89
—	—	—
193	179	181
133	139	129
192	176	149
087	087	085
111	110	116
150	150	148
—	—	—
019	019	020
121	119	117
131	117	116
203	203	207
231	231	232
316	279	233
—	—	—
102	115	116
081	081	087
101	106	119
186	188	186
111	122	132
127	125	137
—	—	—
151	157	150
205	198	189
245	215	237
247	236	230
167	187	186
132	149	150
—	—	—
229	166	126
—	—	—
168	161	159

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
12	13	14	15	16	17	18	19	20	21	22	23	Daily & Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
100	81	81	83	83	77	—	—	—	—	—	—	94
—	—	—	—	—	—	93	89	95	97	95	94	81
85	80	81	79	79	79	75	79	85	87	18	100	93
95	92	97	98	95	94	100	92	92	91	100	100	92
76	85	91	72	95	93	98	88	89	95	98	99	99
98	94	100	98	100	99	100	100	100	100	98	99	98
95	100	98	99	99	100	99	99	95	96	97	95	94
90	92	96	97	87	98	—	—	—	—	—	—	97
—	—	—	—	—	—	98	97	97	97	97	97	96
100	100	97	58	91	100	100	100	100	100	100	100	97
100	97	94	95	98	98	98	98	100	100	100	100	93
98	89	88	88	88	89	89	89	91	87	88	87	93
95	95	95	95	96	97	97	98	98	98	98	100	93
100	100	100	100	100	100	100	100	100	100	100	100	100
99	83	83	87	93	88	—	—	—	—	—	—	94
—	—	—	—	—	—	99	100	95	91	87	89	81
80	80	80	81	87	81	81	81	83	84	85	78	88
91	91	93	94	97	93	96	100	100	100	100	100	91
100	82	87	90	88	95	86	87	87	81	80	78	91
87	100	84	87	88	80	79	79	78	75	76	79	78
66	72	77	80	81	84	86	89	92	91	98	97	75
94	91	94	97	100	100	—	—	—	—	—	—	94
—	—	—	—	—	—	93	94	93	96	93	98	93
92	91	99	99	100	100	100	100	100	100	100	100	93
92	92	91	99	99	99	98	95	93	93	87	90	91
93	100	100	100	100	100	100	100	100	100	100	100	99
100	100	100	99	97	98	99	93	95	82	91	90	97
100	99	100	95	75	78	83	91	91	95	92	100	88
79	79	82	81	85	85	—	—	—	—	—	—	86
60	77	78	80	93	93	100	100	100	100	100	100	86
—	—	—	—	—	—	85	92	76	76	73	71	—
91	90	91	90	92	93	91	94	93	93	93	93	91
267	212	197	191	177	156	—	—	—	—	—	—	257
—	—	—	—	—	—	168	166	179	175	155	153	—
184	179	181	174	177	179	173	178	181	189	186	171	181
108	104	106	106	101	099	105	109	101	107	116	116	125
121	125	132	094	107	102	098	087	091	083	080	081	130
081	074	079	078	077	077	078	079	080	081	079	084	080
121	130	128	137	141	146	148	153	148	152	159	169	122
150	151	151	144	123	128	—	—	—	—	—	—	127
—	—	—	—	—	—	040	036	034	033	031	029	—
039	035	034	021	032	031	031	031	038	041	039	039	037
115	114	112	115	118	117	115	117	115	113	089	072	135
115	139	129	129	137	139	138	143	147	156	161	161	124
295	297	295	297	293	299	211	213	211	213	215	211	197
231	238	241	245	247	245	213	213	215	214	217	214	135
217	185	178	181	181	172	—	—	—	—	—	—	—
—	—	—	—	—	—	170	172	167	161	155	156	223
115	116	117	128	127	127	139	139	141	142	147	131	123
087	084	081	083	087	085	083	076	072	066	064	081	088
116	108	115	122	121	131	126	113	123	122	121	127	101
187	199	176	181	185	180	182	184	181	182	182	184	171
114	112	113	107	107	103	097	096	099	093	067	066	132
133	117	120	120	121	121	—	—	—	—	—	—	—
—	—	—	—	—	—	121	124	121	126	121	122	117
146	141	145	144	145	143	143	137	143	143	146	149	141
199	139	201	201	209	205	207	205	209	209	207	206	193
245	250	237	237	232	234	223	216	222	227	227	227	231
223	213	230	201	204	199	196	187	189	165	175	163	217
190	193	191	180	129	121	132	132	133	134	133	137	155
136	134	137	139	139	139	—	—	—	—	—	—	—
—	—	—	—	—	—	175	179	181	183	185	187	150
121	138	137	129	136	135	149	127	106	106	102	105	160
153	150	148	146	145	143	141	140	141	140	140	149	151

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. FEBRUARY.	1	68	71	70	68	63	66	76	79	74	68	70
	2	100	100	100	87	83	77	78	72	70	72	86
	3	100	100	100	100	75	68	81	72	70	73	78
	4	100	92	90	88	85	85	83	93	95	99	99
	5	84	87	89	88	85	85	85	79	80	81	80
	6	—	—	—	—	—	—	—	—	—	—	—
	7	86	100	85	83	78	78	73	78	77	86	88
	8	100	98	95	92	91	86	92	88	81	84	87
	9	101	97	92	77	79	70	71	76	66	69	65
	10	87	92	98	96	93	94	91	91	80	92	96
	11	100	100	97	100	87	87	95	76	73	69	66
	12	96	98	98	95	89	79	75	70	71	75	83
	13	—	—	—	—	—	—	—	—	—	—	—
	14	100	100	100	81	74	72	63	64	63	65	69
	15	89	89	88	87	77	77	59	74	66	67	77
	16	83	83	86	86	74	71	68	68	71	75	78
	17	96	100	92	83	86	77	76	75	79	81	83
	18	97	96	89	65	74	70	61	63	70	72	78
	19	100	99	98	84	85	82	80	81	81	81	82
	20	—	—	—	—	—	—	—	—	—	—	—
	21	79	73	73	69	66	61	57	53	54	47	48
	22	100	97	95	95	95	91	92	81	79	97	97
	23	91	98	96	88	71	66	51	74	78	71	82
	24	72	76	73	64	69	64	70	75	78	70	77
	25	95	91	91	87	89	88	91	93	88	84	74
	26	100	100	97	87	77	67	64	57	67	69	68
	27	—	—	—	—	—	—	—	—	—	—	—
	28	81	84	79	99	91	100	100	91	88	94	94
Hourly Means.	92	93	91	85	80	78	77	76	75	77	79	
Tension of the Vapour. FEBRUARY.	1	.102	.107	.109	.110	.107	.111	.121	.120	.118	.111	.113
	2	.116	.119	.120	.137	.162	.155	.159	.151	.111	.155	.158
	3	.167	.152	.153	.181	.156	.193	.183	.182	.185	.184	.181
	4	.183	.176	.176	.194	.202	.205	.201	.216	.212	.219	.220
	5	.134	.135	.135	.132	.131	.134	.134	.122	.126	.130	.122
	6	—	—	—	—	—	—	—	—	—	—	—
	7	.109	.116	.102	.100	.098	.102	.101	.110	.114	.127	.131
	8	.107	.108	.108	.111	.117	.111	.128	.131	.127	.129	.129
	9	.123	.121	.129	.126	.127	.124	.138	.146	.132	.137	.130
	10	.103	.098	.095	.082	.081	.084	.084	.087	.078	.089	.085
	11	.050	.047	.048	.055	.054	.059	.071	.060	.060	.060	.061
	12	.081	.081	.087	.089	.088	.088	.090	.095	.100	.104	.111
	13	—	—	—	—	—	—	—	—	—	—	—
	14	.111	.106	.114	.124	.129	.142	.139	.146	.148	.153	.158
	15	.100	.085	.091	.092	.101	.117	.100	.142	.122	.119	.138
	16	.099	.114	.123	.155	.117	.149	.147	.147	.150	.157	.160
	17	.119	.116	.129	.140	.167	.155	.165	.165	.173	.171	.170
	18	.112	.112	.127	.116	.151	.148	.140	.142	.160	.160	.175
	19	.171	.177	.183	.167	.178	.190	.193	.192	.188	.186	.180
	20	—	—	—	—	—	—	—	—	—	—	—
	21	.171	.165	.165	.163	.162	.157	.162	.158	.168	.151	.150
	22	.171	.172	.178	.187	.199	.201	.213	.203	.191	.213	.209
	23	.160	.163	.178	.178	.149	.136	.111	.163	.151	.146	.151
	24	.089	.096	.100	.089	.098	.097	.104	.115	.126	.118	.131
	25	.073	.070	.073	.082	.091	.094	.102	.108	.115	.103	.092
	26	.084	.084	.105	.128	.131	.118	.115	.109	.132	.137	.134
	27	—	—	—	—	—	—	—	—	—	—	—
	28	.127	.133	.131	.158	.156	.174	.181	.175	.176	.198	.199
Hourly Means.	.119	.119	.123	.129	.133	.134	.137	.141	.141	.144	.145	

POUR.

9	10	11
3	4	5
68	70	75
72	75	80
74	78	83
79	80	85
81	80	85
86	88	90
84	87	88
69	65	65
92	90	85
69	66	65
75	73	70
65	63	60
71	70	68
72	74	72
81	82	81
47	47	45
97	97	95
74	72	70
81	81	79
69	71	71
94	91	87
77	79	74
In.	In.	F.
*111	*113	*117
*155	*158	*167
*185	*181	*176
*219	*220	*216
*130	*122	*130
—	—	—
*127	*131	*135
*129	*129	*130
*137	*130	*127
*089	*085	*088
*060	*061	*071
*101	*111	*112
—	—	—
*153	*158	*158
*119	*138	*127
*157	*160	*161
*171	*170	*165
*160	*175	*167
*186	*180	*174
—	—	—
*151	*150	*171
*213	*209	*205
*116	*151	*150
*118	*131	*130
*103	*092	*100
*137	*134	*116
—	—	—
*198	*199	*174
*144	*145	*145

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
89	93	94	97	100	100	100	100	95	92	92	97	84
95	97	99	82	100	100	100	100	100	100	100	100	91
99	89	95	95	95	95	97	97	98	100	100	99	90
97	98	99	100	100	100	88	85	83	87	84	76	96
92	95	97	93	95	93	—	—	—	—	—	—	88
—	—	—	—	—	—	83	84	86	88	91	92	88
76	80	82	87	94	97	100	100	100	100	100	100	88
92	92	92	90	87	100	100	100	100	100	100	98	93
78	72	82	87	79	75	77	81	89	81	87	86	79
100	100	100	100	100	98	96	100	100	100	100	100	96
93	98	93	88	93	94	90	88	90	90	94	90	89
96	100	100	100	100	100	—	—	—	—	—	—	89
—	—	—	—	—	—	94	95	84	84	86	100	89
—	86	81	81	85	99	96	98	100	87	81	89	83
—	91	84	89	87	78	91	95	95	95	95	78	82
95	97	98	100	100	100	100	100	100	100	100	100	88
89	98	100	100	100	100	93	97	100	89	90	100	91
88	96	100	100	100	100	100	99	98	100	100	99	87
—	74	75	71	71	73	89	—	—	—	—	—	83
—	—	—	—	—	—	82	79	83	79	76	92	83
68	61	64	60	79	82	88	87	94	94	96	96	72
100	100	100	100	100	100	100	109	100	100	100	95	96
85	82	91	89	97	98	75	81	93	97	80	83	81
96	86	84	91	77	75	87	85	84	87	93	81	79
97	95	100	100	100	100	100	100	100	100	100	100	94
90	85	91	77	81	82	—	—	—	—	—	—	84
—	—	—	—	—	—	100	100	100	100	100	89	84
79	86	100	97	94	100	89	91	80	86	86	96	90
88	90	92	94	92	91	93	93	94	93	93	93	87
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*123	*122	*110	*106	*103	*104	*106	*109	*110	*111	*116	*119	*113
*177	*182	*183	*161	*181	*185	*187	*187	*187	*180	*178	*175	*163
*156	*156	*165	*159	*151	*149	*146	*148	*148	*158	*166	*174	*165
*213	*207	*194	*194	*186	*180	*153	*143	*138	*142	*137	*121	*184
*128	*131	*130	*126	*127	*127	—	—	—	—	—	—	*125
—	—	—	—	—	—	*110	*108	*110	*111	*113	*118	—
*101	*099	*094	*101	*100	*102	*099	*099	*095	*099	*102	*103	*104
*128	*128	*128	*128	*126	*132	*128	*122	*111	*105	*119	*120	*121
*116	*134	*151	*156	*141	*129	*125	*122	*133	*125	*128	*147	*132
*085	*083	*082	*084	*084	*071	*064	*063	*059	*055	*053	*051	*078
*077	*081	*079	*073	*076	*077	*075	*076	*077	*078	*081	*078	*068
*110	*104	*099	*094	*091	*089	—	—	—	—	—	—	—
—	—	—	—	—	—	*138	*130	*129	*133	*113	*115	*103
*150	*162	*115	*141	*111	*148	*139	*137	*134	*125	*108	*113	*136
*124	*135	*125	*117	*114	*103	*109	*110	*108	*108	*107	*097	*112
*149	*144	*140	*142	*139	*135	*133	*130	*131	*131	*124	*122	*139
*157	*151	*150	*144	*143	*135	*124	*122	*119	*106	*103	*119	*142
*158	*162	*164	*162	*169	*169	*169	*163	*161	*165	*164	*169	*153
*167	*169	*166	*165	*168	*195	—	—	—	—	—	—	—
—	—	—	—	—	—	*188	*150	*188	*174	*170	*190	*179
*155	*142	*147	*141	*170	*167	*177	*174	*168	*165	*170	*168	*162
*202	*197	*194	*194	*186	*192	*186	*186	*186	*185	*177	*170	*192
*142	*138	*140	*138	*143	*144	*109	*117	*124	*122	*099	*104	*140
*127	*098	*103	*113	*094	*094	*099	*091	*085	*083	*079	*069	*101
*105	*103	*101	*097	*095	*097	*099	*093	*092	*091	*088	*085	*094
*155	*141	*146	*131	*134	*133	—	—	—	—	—	—	—
—	—	—	—	—	—	*094	*092	*086	*084	*104	*130	*119
*162	*168	*186	*180	*165	*167	*142	*135	*114	*109	*111	*112	*155
*143	*139	*138	*135	*134	*134	*129	*127	*125	*123	*121	*122	*133

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. MARCH.	1	100	100	100	100	98	91	83	82	98	75	88	
	2	100	100	100	94	100	81	94	87	100	98	100	
	3	100	100	100	100	100	100	100	97	91	87	89	
	4	94	97	100	97	89	88	84	80	89	97	95	91
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	91	100	91	84	82	88	82	80	81	65	71	74
	7	100	97	96	84	85	78	76	70	74	70	63	77
	8	83	75	79	78	73	70	64	71	76	76	86	91
	9	95	97	98	98	96	81	85	79	76	76	79	81
	10	90	93	93	91	81	97	70	68	74	62	72	64
	11	100	100	90	74	70	69	78	88	70	68	70	79
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	87	83	73	79	84	66	74	87	83	91	81	84
	14	94	89	80	86	77	82	84	85	87	76	91	100
	15	100	100	100	93	91	79	87	100	70	73	70	68
	16	100	100	91	90	84	74	73	74	72	72	77	68
	17	83	82	73	85	85	80	75	74	65	67	68	70
	18	80	84	58	62	64	65	63	73	79	90	93	94
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	100	100	100	90	84	88	82	96	99	100	97	99
	21	84	92	93	94	88	73	66	72	65	65	60	66
	22	90	91	83	76	72	71	77	77	77	75	80	79
	23	83	81	74	73	71	61	76	75	76	76	75	76
	24	84	77	71	72	65	77	82	85	77	79	81	88
	25	86	86	76	74	79	82	85	82	81	74	74	76
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	94	91	96	96	96	61	62	59	61	65	66	68
	28	96	91	90	65	67	63	64	64	65	73	69	72
	29	97	94	86	73	73	70	71	68	65	48	48	53
	30	84	75	75	69	71	74	76	80	71	68	69	72
	31	96	93	86	82	77	73	73	78	82	87	90	95
Hourly Means	92	92	87	84	82	77	77	79	77	77	77	80	
Tension of the Vapour. MARCH.	1	In. .074	In. .067	In. .072	In. .076	In. .080	In. .084	In. .087	In. .092	In. .084	In. .105	In. .081	In. .069
	2	.063	.071	.080	.083	.085	.089	.098	.102	.116	.112	.110	.102
	3	.107	.108	.104	.107	.111	.120	.126	.128	.131	.128	.124	.100
	4	.098	.093	.103	.110	.115	.111	.113	.106	.117	.118	.110	.160
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	.105	.113	.100	.108	.115	.128	.123	.129	.149	.147	.128	.139
	7	.101	.119	.147	.149	.168	.154	.176	.172	.187	.181	.161	.188
	8	.178	.171	.188	.189	.199	.202	.187	.208	.213	.215	.217	.204
	9	.123	.122	.129	.133	.135	.146	.125	.120	.120	.123	.125	.122
	10	.087	.090	.080	.093	.094	.119	.104	.108	.134	.168	.120	.107
	11	.097	.101	.105	.108	.113	.117	.148	.164	.157	.154	.138	.150
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	.116	.117	.099	.106	.108	.099	.101	.121	.118	.120	.104	.105
	14	.073	.068	.068	.074	.072	.075	.082	.089	.079	.166	.073	.075
	15	.055	.057	.062	.062	.069	.063	.079	.063	.070	.074	.070	.065
	16	.080	.084	.088	.103	.103	.100	.103	.117	.112	.115	.121	.108
	17	.110	.114	.103	.116	.116	.132	.107	.165	.094	.099	.101	.103
	18	.080	.107	.089	.106	.115	.124	.123	.148	.157	.170	.172	.168
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	.139	.148	.173	.181	.169	.175	.168	.191	.201	.208	.209	.212
	21	.214	.220	.219	.239	.230	.248	.220	.244	.226	.225	.202	.206
	22	.151	.163	.161	.161	.158	.157	.174	.171	.169	.169	.177	.168
	23	.162	.169	.152	.158	.161	.147	.188	.192	.184	.188	.184	.183
	24	.132	.140	.159	.159	.154	.182	.195	.205	.176	.185	.192	.199
	25	.183	.188	.192	.185	.184	.195	.202	.198	.208	.214	.213	.218
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	.178	.178	.181	.163	.167	.152	.154	.152	.159	.164	.158	.151
	28	.144	.149	.170	.141	.165	.173	.188	.180	.196	.212	.199	.208
	29	.176	.158	.224	.224	.237	.235	.257	.263	.303	.255	.234	.256
	30	.153	.167	.178	.171	.189	.180	.200	.201	.194	.198	.235	.210
	31	.204	.216	.232	.270	.290	.314	.334	.352	.393	.468	.455	.441
Hourly Means	.126	.131	.135	.140	.146	.146	.154	.161	.164	.169	.162	.162	



UR.

9	10	11
3	4	5
98	75	88
98	97	100
87	89	74
97	95	91
—	—	—
65	71	74
70	63	77
76	86	91
76	79	81
62	72	64
68	70	79
—	—	—
91	81	81
76	91	100
73	70	68
72	77	68
67	68	70
90	93	91
—	—	—
100	97	99
65	60	66
75	80	79
76	75	76
79	81	88
74	71	76
—	—	—
65	66	68
73	69	72
48	48	53
68	69	72
87	90	95
—	—	—
77	77	80
In.	In.	In.
*105	*081	*069
*112	*110	*102
*128	*121	*100
*118	*110	*100
—	—	—
*117	*128	*150
*181	*161	*188
*215	*217	*201
*123	*125	*122
*168	*120	*107
*131	*138	*150
—	—	—
*120	*104	*106
*166	*074	*075
*071	*070	*066
*115	*121	*108
*099	*101	*103
*170	*172	*108
—	—	—
*208	*209	*212
*225	*202	*206
*169	*177	*168
*188	*181	*183
*185	*192	*189
*214	*213	*218
—	—	—
*164	*158	*151
*212	*199	*208
*225	*233	*256
*198	*235	*210
*168	*455	*441
—	—	—
*169	*162	*162

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
84	82	93	100	100	100	100	100	100	100	100	100	94
100	100	100	100	100	100	100	100	100	100	100	100	98
76	84	85	88	91	91	85	88	91	90	89	95	91
97	97	100	100	98	100	—	—	—	—	—	—	94
—	—	—	—	—	—	100	100	100	—	—	—	86
74	93	95	100	100	96	100	100	100	100	100	100	90
72	79	81	79	79	76	79	79	74	77	79	80	79
97	99	99	99	100	99	99	97	83	87	85	88	86
77	90	83	86	88	84	84	85	78	83	89	97	86
70	78	81	95	95	100	100	100	100	100	100	100	87
90	87	84	87	99	81	—	—	—	—	—	—	83
—	—	—	—	—	—	100	77	80	78	79	87	83
75	98	85	83	95	98	100	98	91	93	94	93	87
96	93	93	100	100	100	100	100	100	100	100	100	92
80	80	83	97	96	96	100	100	100	100	100	100	90
62	61	70	69	71	73	75	85	85	87	80	82	78
70	94	96	97	97	95	86	85	100	91	91	86	83
97	80	81	80	91	91	—	—	—	—	—	—	84
—	—	—	—	—	—	93	99	100	100	100	100	84
99	99	99	100	100	100	100	100	98	93	90	90	96
72	71	75	78	88	86	90	92	91	90	89	89	80
85	88	96	88	90	91	89	86	91	89	86	82	84
76	74	81	90	91	89	87	87	89	81	89	84	80
90	85	82	88	84	84	83	84	88	86	83	86	82
81	82	87	92	91	93	—	—	—	—	—	—	80
—	—	—	—	—	—	72	71	72	71	72	72	82
75	80	88	86	88	88	100	87	89	88	89	91	82
78	89	81	84	85	78	89	96	86	98	92	100	80
57	6	70	77	80	83	91	96	91	90	96	90	77
78	8	86	87	89	92	93	91	96	98	99	96	82
—	—	100	100	89	89	88	88	86	88	83	84	88
82	87	88	90	92	91	92	92	91	91	90	91	86
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*080	*075	*079	*068	*081	*080	*065	*051	*060	*069	*06	*072	*077
*095	*093	*093	*096	*095	*098	*103	*107	*108	*111	*111	*111	*097
*095	*099	*091	*091	*092	*090	*089	*091	*104	*104	*104	*100	*106
*100	*097	*101	*101	*101	*099	—	—	—	—	—	—	—
—	—	—	—	—	—	*111	*115	*120	*101	*092	*109	*106
*136	*137	*122	*115	*115	*111	*102	*103	*103	*101	*102	*099	*117
*175	*183	*184	*185	*187	*181	*183	*183	*178	*180	*178	*180	*169
*201	*200	*197	*196	*200	*191	*189	*175	*138	*137	*131	*132	*187
*117	*133	*121	*125	*122	*115	*113	*113	*091	*096	*093	*098	*118
*107	*109	*107	*110	*109	*113	*113	*106	*103	*099	*096	*100	*105
*139	*145	*110	*141	*160	*137	—	—	—	—	—	—	—
—	—	—	—	—	—	*172	*132	*128	*118	*113	*117	*132
—	—	—	—	—	—	*090	*085	*081	*079	*079	*077	*098
*081	*060	*060	*062	*062	*062	*060	*058	*057	*058	*056	*071	—
*071	*067	*068	*074	*071	*069	*071	*070	*069	*067	*073	*076	*089
*095	*092	*102	*101	*108	*106	*107	*118	*113	*117	*110	*111	*105
*101	*120	*113	*113	*107	*109	*091	*087	*093	*093	*093	*091	*101
*172	*140	*149	*140	*155	*153	—	—	—	—	—	—	—
—	—	—	—	—	—	*111	*135	*140	*138	*135	*133	*138
*216	*216	*212	*213	*207	*205	*208	*209	*215	*278	*252	*250	*202
*185	*163	*165	*161	*109	*164	*160	*161	*156	*155	*147	*147	*191
*172	*171	*179	*161	*161	*169	*165	*162	*172	*167	*165	*160	*166
*106	*155	*157	*155	*149	*142	*139	*137	*138	*130	*135	*130	*158
*185	*168	*165	*179	*171	*177	*180	*181	*185	*182	*180	*181	*175
*221	*223	*202	*207	*232	*235	—	—	—	—	—	—	—
—	—	—	—	—	—	*158	*150	*148	*142	*140	*140	*193
*162	*163	*171	*161	*151	*152	*163	*141	*138	*138	*138	*138	*157
*210	*206	*211	*211	*213	*208	*207	*201	*203	*210	*195	*186	*191
*250	*210	*201	*194	*188	*182	*176	*173	*161	*160	*161	*153	*210
*212	*201	*208	*210	*215	*214	*214	*213	*213	*211	*208	*200	*203
*307	*367	*343	*338	*287	*225	*196	*192	*180	*179	*166	*167	*292
*137	*152	*150	*150	*146	*143	*140	*135	*134	*134	*131	*130	*146

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.													
Hour of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11	
Hour of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air. APRIL.	1	78	90	85	85	82	82	79	78	78	74	72	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	88	88	83	79	78	79	76	74	75	79	70	69
	4	87	90	93	93	92	92	94	94	98	94	94	96
	5	100	90	78	69	57	53	71	72	75	73	65	66
	6	78	84	68	65	59	58	68	64	64	62	62	49
	7	73	69	60	53	62	65	64	59	62	57	57	59
	8	80	78	56	54	50	55	54	55	54	51	51	50
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	86	77	56	60	57	62	55	50	47	52	52	54
	11	68	56	51	45	47	44	52	51	61	63	62	65
	12	93	83	67	66	63	64	68	58	57	57	60	69
	13	75	69	68	65	66	72	84	73	82	82	82	84
	14	90	91	89	86	75	72	69	74	79	79	80	82
	15	72	67	75	61	52	47	45	44	43	38	41	35
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	72	65	64	59	57	52	49	66	61	67	68	67
	18	55	59	63	61	61	60	65	64	92	100	100	98
	19	96	99	86	64	68	66	64	70	60	70	67	67
	20	87	78	51	63	64	66	69	60	71	68	70	67
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	76	76	73	67	70	67	61	62	68	72	66	65
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	61	61	61	71	72	71	55	50	50	48	50	44
	25	87	76	72	73	64	63	60	63	65	74	70	79
	26	86	70	66	61	61	66	62	60	54	55	59	58
	27	96	71	76	71	70	65	63	87	52	46	47	51
	28	79	38	72	74	68	63	64	53	47	52	64	68
	29	99	83	74	74	68	65	60	56	48	44	38	42
	30	—	—	—	—	—	—	—	—	—	—	—	—
	Hourly Means	82	75	70	67	65	64	65	64	64	65	61	65
Tension of the Vapour. APRIL.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
	1	*151	*176	*165	*165	*165	*179	*170	*167	*168	*163	*150	*149
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	*166	*201	*209	*211	*222	*228	*226	*221	*224	*234	*232	*227
	4	*238	*246	*255	*268	*271	*271	*284	*285	*318	*300	*283	*275
	5	*181	*170	*157	*147	*135	*136	*202	*193	*198	*190	*168	*176
	6	*128	*159	*150	*177	*172	*180	*210	*202	*202	*203	*209	*174
	7	*152	*159	*157	*159	*196	*201	*192	*173	*181	*171	*169	*175
	8	*133	*157	*155	*170	*167	*187	*193	*195	*214	*210	*204	*202
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	*198	*230	*229	*303	*276	*311	*313	*305	*279	*286	*241	*259
	11	*214	*189	*188	*164	*173	*167	*191	*185	*219	*216	*202	*210
	12	*168	*196	*186	*219	*225	*234	*245	*236	*238	*226	*231	*241
	13	*165	*161	*163	*156	*169	*179	*208	*197	*205	*202	*199	*206
	14	*202	*213	*213	*226	*208	*203	*208	*245	*238	*239	*238	*223
	15	*181	*192	*228	*215	*208	*200	*203	*198	*195	*173	*180	*172
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	*139	*137	*140	*134	*141	*138	*138	*195	*182	*181	*189	*166
	18	*168	*112	*128	*126	*129	*133	*127	*145	*148	*161	*167	*161
	19	*168	*169	*156	*122	*144	*142	*155	*160	*145	*160	*153	*160
	20	*133	*138	*122	*139	*173	*185	*219	*197	*214	*245	*231	*224
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	*200	*201	*206	*197	*203	*199	*207	*218	*234	*226	*220	*231
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	*139	*132	*136	*178	*193	*196	*157	*139	*137	*133	*134	*145
	25	*137	*149	*154	*183	*172	*175	*180	*193	*196	*208	*203	*206
	26	*164	*151	*154	*151	*182	*191	*186	*180	*180	*172	*190	*181
	27	*158	*165	*207	*213	*20	*229	*221	*184	*204	*189	*184	*182
	28	*185	*151	*188	*158	*195	*191	*187	*163	*159	*183	*213	*216
	29	*207	*259	*211	*201	*196	*196	*197	*192	*168	*160*	*138	*141
	30	—	—	—	—	—	—	—	—	—	—	—	—
Hourly Means	*168	*174	*177	*185	*189	*195	*201	*197	*203	*201	*199	*197	

\* Good Friday.

9	10	11
3	4	5
74	71	72
79	70	69
94	94	96
73	65	66
62	62	49
57	57	59
51	51	50
52	52	54
63	62	61
57	60	61
82	82	84
79	80	82
38	41	35
67	68	67
100	100	98
70	67	67
68	70	67
72	66	65
48	50	44
73	70	59
55	59	58
46	47	51
52	61	68
41	38	42
65	61	65
In. '163	In. '150	In. '149
'234	'232	'227
'300	'283	'278
'190	'168	'176
'203	'209	'171
'171	'169	'175
'210	'201	'212
'286	'291	'279
'216	'202	'210
'226	'231	'211
'202	'199	'208
'229	'238	'221
'173	'180	'172
'181	'189	'163
'161	'167	'161
'160	'153	'160
'245	'234	'224
'226	'220	'231
'133	'134	'145
'208	'203	'206
'172	'190	'181
'189	'184	'182
'183	'213	'216
'160	'128	'141
'201	'199	'197

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
78	83	88	88	91	94	—	—	—	—	—	—	84
73	74	72	76	75	69	90	85	88	92	93	96	76
91	91	93	89	86	86	88	90	94	96	96	100	93
63	84	84	81	86	86	88	87	89	93	90	89	79
47	55	64	61	68	70	70	78	73	73	74	83	67
61	65	81	81	86	66	79	78	79	77	78	81	69
59	66	79	73	76	71	—	—	—	—	—	—	68
55	53	55	63	73	72	93	87	84	91	86	86	62
61	73	70	69	81	84	68	75	88	90	96	94	67
72	68	72	66	67	87	91	88	87	82	74	74	72
65	91	88	88	90	93	91	92	94	91	91	92	83
93	87	86	86	86	87	96	88	71	71	72	83	82
35	45	50	55	57	59	—	—	—	—	—	—	57
61	74	71	71	70	69	65	69	72	73	73	85	65
81	84	87	92	94	93	56	75	68	68	66	58	80
70	73	78	74	73	90	62	62	87	86	88	90	79
62	68	75	76	71	71	99	91	100	80	87	95	69
59	76	55	55	57	71	66	56	61	69	71	76	67
65	79	82	78	61	72	59	62	68	72	74	72	67
82	73	70	74	71	51	73	77	77	88	92	83	68
51	51	76	81	86	91	56	77	76	79	86	87	72
60	61	59	71	79	80	94	94	89	91	97	93	73
82	84	90	88	90	91	80	82	88	91	88	84	72
42	52	57	60	65	73	97	97	99	99	99	100	78
—	—	—	—	—	—	80	78	80	81	80	76	66
67	71	74	75	77	79	79	80	84	82	83	85	73
In. '158	In. '159	In. '161	In. '161	In. '170	In. '168	In. '181	In. '168	In. '171	In. '176	In. '177	In. '171	In. '196
'226	'224	'223	'229	'219	'216	'219	'221	'219	'225	'221	'222	'220
'259	'252	'238	'211	'195	'189	'190	'184	'182	'181	'176	'172	'230
'162	'193	'177	'164	'165	'155	'147	'140	'139	'143	'138	'135	'163
'137	'160	'168	'163	'159	'160	'153	'158	'153	'153	'153	'164	'170
'188	'161	'176	'161	'177	'145	'155	'151	'155	'131	'132	'131	'165
'251	'212	'213	'189	'192	'189	—	—	—	—	—	—	'192
'275	'258	'251	'230	'249	'232	'236	'207	'195	'195	'188	'187	'210
'210	'232	'227	'241	'286	'285	'210	'191	'196	'177	'195	'161	'201
'239	'222	'216	'218	'227	'256	'257	'251	'245	'221	'187	'189	'224
'198	'204	'192	'191	'195	'197	'198	'199	'196	'203	'203	'203	'191
'239	'216	'199	'195	'210	'208	'199	'179	'174	'175	'174	'197	'209
'141	'155	'155	'162	'167	'165	—	—	—	—	—	—	'176
'168	'177	'167	'167	'161	'161	'165	'161	'158	'153	'148	'154	'154
'156	'139	'143	'157	'155	'143	'135	'172	'151	'146	'135	'145	'157
'163	'154	'147	'148	'128	'139	'127	'095	'121	'117	'119	'119	'133
'199	'192	'191	'190	'178	'180	'136	'141	'138	'120	'128	'131	'146
—	—	—	—	—	—	—	—	—	—	—	—	'194
'227	'221	'158	'147	'142	'150	—	'221	'200	'208	'209	'210	'202
'173	'188	'180	'159	'130	'131	'121	'130	'146	'154	'156	'148	'186
'208	'189	'181	'189	'185	'143	'127	'131	'131	'131	'133	'124	'147
'147	'133	'182	'181	'186	'171	'160	'180	'163	'158	'155	'141	'176
'194	'187	'174	'185	'185	'179	'162	'146	'140	'140	'142	'140	'165
'215	'238	'242	'210	'253	'259	'181	'183	'180	'193	'192	'190	'191
'142	'149	'150	'146	'151	'116	'265	'265	'287	'265	'263	'261	'217
—	—	—	—	—	—	'174	'166	'165	'161	'187	'184	'176
'196	'193	'188	'185	'186	'182	'181	'177	'174	'173	'174	'171	'186

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Guttinge Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. MAY.	1	80	81	80	82	78	77	7	86	92	91	93
	2	98	98	91	81	77	82	81	81	78	77	73
	3	88	87	76	75	68	66	60	59	52	54	50
	4	83	73	68	59	60	58	62	62	64	69	72
	5	89	84	85	79	77	72	72	68	66	68	67
	6	96	87	84	79	74	72	72	72	75	72	71
	7	—	—	—	—	—	—	—	—	—	—	—
	8	84	66	61	61	57	53	51	52	52	51	55
	9	82	65	67	61	62	66	63	59	61	67	69
	10	94	89	79	69	72	73	73	74	74	72	74
	11	93	93	84	77	76	67	70	75	83	84	81
	12	65	62	59	59	52	50	46	45	45	54	56
	13	76	79	86	87	97	98	98	87	87	77	83
	14	—	—	—	—	—	—	—	—	—	—	—
	15	76	65	54	55	55	58	61	59	61	67	68
	16	99	90	80	74	79	83	86	77	74	77	79
	17	97	84	82	80	75	72	69	67	70	66	63
	18	94	86	82	70	69	61	62	56	56	52	54
	19	90	87	81	78	75	74	73	75	74	73	91
	20	100	100	99	93	84	87	85	92	95	93	96
	21	—	—	—	—	—	—	—	—	—	—	—
	22	87	74	71	78	96	73	72	72	72	72	72
	23	82	83	77	67	66	66	68	70	72	73	76
	24	99	97	92	95	92	90	69	71	64	58	62
	25	90	92	87	83	81	75	74	72	70	54	38
	26	77	68	61	59	56	62	63	69	57	51	51
	27	81	80	75	72	70	74	74	68	64	57	58
	28	—	—	—	—	—	—	—	—	—	—	—
	29	92	87	89	89	83	87	89	81	79	80	91
	30	93	77	58	57	50	51	50	41	47	49	50
	31	63	63	58	55	51	52	37	44	36	37	39
Hourly Means	87	81	77	73	72	70	69	68	67	66	68	
Tension of the Vapour. MAY.	1	.202	.219	.228	.260	.258	.262	.261	.266	.266	.281	
	2	.253	.262	.277	.294	.311	.311	.318	.322	.320	.303	
	3	.266	.327	.320	.332	.337	.338	.322	.300	.277	.313	
	4	.259	.251	.272	.281	.282	.282	.275	.267	.269	.282	
	5	.367	.432	.441	.492	.507	.509	.566	.498	.450	.477	
	6	.398	.438	.472	.478	.472	.514	.522	.528	.577	.525	
	7	—	—	—	—	—	—	—	—	—	—	
	8	.216	.204	.214	.248	.233	.231	.248	.241	.235	.231	
	9	.241	.251	.292	.268	.290	.309	.317	.324	.314	.305	
	10	.289	.293	.280	.265	.279	.283	.292	.300	.321	.305	
	11	.287	.287	.272	.269	.273	.255	.261	.258	.280	.280	
	12	.175	.181	.182	.198	.196	.196	.182	.181	.186	.221	
	13	.161	.185	.210	.214	.239	.262	.276	.286	.265	.238	
	14	—	—	—	—	—	—	—	—	—	—	
	15	.185	.206	.210	.224	.267	.269	.267	.264	.252	.244	
	16	.310	.348	.356	.352	.371	.402	.413	.387	.367	.365	
	17	.259	.322	.338	.319	.353	.372	.369	.379	.406	.393	
	18	.343	.406	.414	.416	.428	.396	.421	.407	.439	.413	
	19	.398	.411	.463	.491	.513	.559	.551	.544	.569	.511	
	20	.481	.481	.550	.629	.595	.608	.686	.632	.662	.613	
	21	—	—	—	—	—	—	—	—	—	—	
	22	.400	.316	.309	.390	.428	.389	.377	.380	.382	.384	
	23	.372	.333	.337	.285	.280	.291	.305	.327	.364	.371	
	24	.403	.406	.431	.482	.552	.571	.480	.532	.485	.463	
	25	.505	.524	.438	.458	.518	.526	.534	.523	.540	.472	
	26	.292	.279	.269	.274	.279	.331	.387	.433	.370	.313	
	27	.298	.313	.554	.284	.386	.405	.401	.407	.401	.354	
	28	—	—	—	—	—	—	—	—	—	—	
	29	.455	.493	.493	.519	.581	—	.629	.621	.594	.631	
	30	.380	.377	.328	.328	.296	—	.324	.269	.257	.244	
	31	.177	.188	.180	.188	.188	—	.154	.186	.153	.162	
Hourly Means	.306	.320	.330	.347	.359	.366	.373	.372	.369	.359		

JR.

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

9	10	11
3	4	5
91	93	92
77	73	73
54	50	41
69	72	80
68	67	83
72	71	73
—	—	—
51	55	55
67	69	65
72	74	76
84	81	72
54	56	59
77	83	75
—	—	—
67	68	90
77	79	89
66	63	62
52	54	59
73	91	93
93	96	98
—	—	—
72	72	73
73	76	73
58	62	74
54	38	57
51	51	51
57	58	60
—	—	—
80	91	77
49	50	50
37	39	40
66	68	70

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
94	97	97	94	98	99	100	100	98	99	98	97	90
72	77	83	81	89	93	73	75	80	91	89	89	83
62	68	80	84	85	91	92	87	87	86	89	93	74
79	77	77	79	80	77	79	80	80	88	91	96	75
82	86	78	83	88	87	87	88	100	100	97	97	83
84	87	88	78	78	77	—	—	—	—	—	—	—
—	—	—	—	—	—	91	79	74	85	79	79	79
60	64	63	64	58	53	54	74	76	81	83	76	63
79	79	91	95	97	99	99	100	100	100	100	93	80
80	75	78	81	83	85	89	94	94	97	96	96	82
63	57	53	56	55	57	58	59	62	64	62	62	69
61	64	63	69	69	63	63	74	70	69	83	79	62
81	83	85	84	83	83	—	—	—	—	—	—	—
—	—	—	—	—	—	71	71	70	78	74	78	82
84	96	93	96	100	97	97	100	100	100	100	99	80
88	93	97	78	83	79	83	85	83	91	94	87	85
64	71	76	85	89	91	89	97	93	96	96	97	80
61	70	73	77	78	90	91	95	95	95	97	95	76
93	100	96	93	97	98	100	100	100	100	100	100	89
95	98	98	100	100	100	—	—	—	—	—	—	95
—	—	—	—	—	—	97	99	98	97	95	92	—
77	81	90	79	79	89	96	92	91	92	83	82	81
74	70	68	69	64	64	80	85	91	89	97	95	76
72	76	79	82	86	86	83	94	96	96	97	91	83
54	60	62	61	66	61	72	72	83	92	80	90	72
49	57	67	53	64	70	73	74	79	74	76	77	64
65	73	75	86	86	82	—	—	—	—	—	—	78
—	—	—	—	—	—	92	99	97	96	97	96	—
77	80	76	83	90	88	86	86	86	88	91	95	85
49	53	61	61	64	65	62	70	62	59	69	75	59
45	47	76	82	87	76	69	79	80	84	84	82	61
72	76	79	79	81	81	82	85	87	89	89	88	77

In.	In.	In.
*284	*302	*296
*303	*292	*298
*313	*291	*243
*282	*275	*300
*477	*478	*469
*525	*479	*495
—	—	—
*231	*253	*248
*305	*326	*289
*305	*209	*308
*280	*287	*265
*221	*232	*242
*238	*228	*200
—	—	—
*244	*235	*297
*365	*393	*495
*393	*375	*351
*413	*424	*446
*514	*549	*592
*613	*584	*616
—	—	—
*384	*364	*395
*364	*371	*370
*463	*506	*486
*472	*363	*462
*313	*294	*300
*354	*373	*357
—	—	—
*631	*669	*657
*244	*232	*216
*162	*176	*186
*339	*358	*362

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*294	*264	*252	*234	*237	*232	*233	*223	*213	*216	*212	*213	*247
*284	*266	*252	*235	*232	*225	*237	*244	*236	*231	*211	*227	*268
*290	*276	*280	*270	*253	*253	*266	*242	*240	*239	*229	*221	*280
*310	*314	*326	*327	*331	*325	*317	*310	*311	*325	*327	*315	*297
*418	*395	*439	*452	*390	*390	*379	*377	*364	*349	*326	*316	*426
*436	*480	*482	*433	*417	*387	—	—	—	—	—	—	—
—	—	—	—	—	—	*282	*196	*180	*186	*185	*189	*405
—	*239	*222	*233	*215	*207	*204	*232	*218	*268	*210	*200	*226
—	*316	*330	*332	*330	*321	*291	*272	*298	*303	*302	*265	*501
—	*302	*286	*282	*280	*289	*296	*305	*303	*304	*300	*300	*294
—	*254	*299	*189	*191	*181	*189	*180	*177	*175	*163	*162	*229
—	*234	*215	*185	*177	*173	*147	*141	*142	*138	*140	*149	*182
—	*196	*210	*219	*220	*220	*219	—	—	—	—	—	—
—	—	—	—	—	—	*187	*167	*148	*150	*145	*157	*208
—	*284	*309	*281	*292	*301	*299	*304	*316	*319	*319	*315	*317
—	*231	*369	*344	*299	*280	*255	*246	*228	*219	*223	*208	*322
—	*315	*313	*316	*320	*312	*305	*309	*315	*306	*286	*279	*330
—	*458	*417	*374	*354	*346	*351	*343	*338	*334	*334	*341	*387
—	*586	*521	*428	*457	*472	*472	*461	*458	*456	*450	*434	*491
—	*602	*609	*543	*450	*466	*500	—	—	—	—	—	—
—	—	—	—	—	—	*489	*498	*483	*477	*461	*439	*548
—	*380	*364	*344	*322	*372	*368	*379	*375	*373	*351	*350	*368
—	*360	*319	*308	*322	*301	*315	*359	*398	*389	*431	*413	*341
—	*456	*441	*466	*381	*392	*384	*367	*369	*367	*351	*369	*433
—	*389	*371	*338	*293	*291	*262	*287	*280	*300	*306	*258	*388
—	*287	*291	*282	*210	*217	*250	*252	*252	*242	*242	*246	*286
—	*408	*395	*326	*335	*332	*323	—	—	—	—	—	—
—	—	—	—	—	—	*408	*407	*403	*400	*305	*382	*369
—	*666	*592	*504	*464	*450	*398	*358	*347	*331	*317	*314	*498
—	*204	*203	*212	*210	*222	*223	*197	*199	*186	*174	*187	*250
—	*194	*198	*265	*267	*247	*230	*246	*248	*206	*209	*202	*201
*332	*339	*324	*309	*305	*300	*296	*291	*288	*285	*276	*278	*328

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.												
Hours of Mean Gottagen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
Humidity of the Air. JUNE.	1	73	56	51	47	42	36	37	29	48	54	57
	2	83	77	74	74	71	67	62	60	58	58	63
	3	89	92	92	90	83	87	85	83	78	77	81
	4	—	—	—	—	—	—	—	—	—	—	—
	5	92	81	83	84	80	75	73	86	83	86	69
	6	88	83	81	78	75	72	64	65	61	62	57
	7	72	67	63	61	57	56	56	51	49	49	50
	8	71	70	66	66	75	74	75	74	77	75	71
	9	89	77	100	81	74	72	66	62	60	61	63
	10	87	92	62	62	67	68	69	71	67	77	72
	11	—	—	—	—	—	—	—	—	—	—	—
	12	66	57	48	45	38	31	37	39	39	44	42
	13	61	45	46	38	36	31	30	28	23	26	27
	14	81	79	80	76	71	63	67	80	70	59	66
	15	90	81	83	82	75	48	46	41	36	34	34
	16	79	72	66	62	58	69	47	63	58	56	62
	17	89	83	77	76	72	68	68	72	78	66	75
	18	—	—	—	—	—	—	—	—	—	—	—
	19	99	98	89	85	86	85	84	73	82	85	82
	20	95	92	83	77	79	86	89	82	80	78	77
	21	90	82	92	89	76	76	71	69	65	62	59
	22	91	86	79	81	85	80	78	73	75	72	72
	23	99	100	100	99	96	91	84	80	51	63	49
	24	83	75	65	57	45	42	36	31	30	32	26
	25	—	—	—	—	—	—	—	—	—	—	—
	26	91	78	68	74	70	66	64	60	58	55	58
	27	88	87	79	71	75	77	75	77	71	72	72
	28	99	100	94	96	89	90	73	75	69	73	67
	29	78	74	72	74	73	71	70	72	71	71	66
	30	89	82	81	51	79	71	69	52	57	62	60
Hourly Means	85	80	76	73	70	68	64	63	64	62	64	63
Tension of the Vapour. JUNE.	1	In. .230	In. .205	In. .201	In. .197	In. .182	In. .174	In. .189	In. .156	In. .254	In. .287	In. .313
	2	.280	.329	.359	.390	.411	.423	.418	.419	.417	.409	.398
	3	.560	.560	.560	.584	.583	.581	.590	.580	.575	.571	.577
	4	—	—	—	—	—	—	—	—	—	—	—
	5	.396	.397	.464	.472	.468	.479	.478	.438	.419	.496	.473
	6	.291	.304	.303	.305	.289	.289	.283	.292	.266	.276	.256
	7	.230	.234	.236	.244	.252	.266	.287	.276	.278	.284	.272
	8	.276	.311	.342	.361	.438	.449	.437	.435	.449	.460	.481
	9	.373	.401	.540	.497	.482	.492	.485	.472	.473	.492	.518
	10	.445	.481	.395	.435	.507	.485	.488	.517	.511	.534	.476
	11	—	—	—	—	—	—	—	—	—	—	—
	12	.222	.261	.178	.173	.161	.144	.164	.174	.176	.201	.193
	13	.192	.155	.176	.152	.162	.164	.157	.154	.127	.141	.148
	14	.287	.235	.278	.314	.310	.341	.333	.363	.378	.366	.408
	15	.474	.531	.610	.668	.702	.564	.578	.549	.510	.492	.433
	16	.621	.624	.614	.659	.667	.706	.593	.706	.686	.681	.655
	17	.571	.647	.675	.665	.717	.728	.740	.692	.688	.695	.679
	18	—	—	—	—	—	—	—	—	—	—	—
	19	.574	.596	.592	.664	.676	.708	.741	.680	.651	.659	.676
	20	.525	.571	.592	.598	.638	.630	.674	.615	.605	.579	.597
	21	.438	.497	.489	.517	.478	.463	.464	.466	.440	.436	.443
	22	.446	.432	.512	.551	.539	.531	.541	.550	.528	.518	.509
	23	.548	.544	.572	.584	.625	.672	.636	.665	.497	.486	.381
	24	.407	.407	.390	.346	.304	.302	.269	.243	.239	.260	.203
	25	—	—	—	—	—	—	—	—	—	—	—
	26	.494	.544	.580	.615	.633	.628	.643	.629	.613	.589	.608
	27	.453	.533	.573	.608	.626	.626	.619	.675	.654	.638	.637
	28	.682	.667	.689	.706	.677	.657	.535	.544	.546	.554	.508
	29	.401	.443	.503	.564	.559	.538	.551	.578	.586	.590	.570
	30	.433	.447	.540	.551	.571	.575	.544	.489	.520	.563	.543
Hourly Means	.443	.431	.463	.478	.487	.488	.478	.475	.464	.471	.461	.447

PR.

9	10	11
3	4	5
54	57	57
58	63	61
77	81	83
—	—	—
86	69	75
62	57	55
49	59	49
75	71	80
61	61	72
77	72	72
—	—	—
44	42	40
26	27	27
59	66	69
34	31	31
56	62	63
66	75	71
—	—	—
85	82	84
78	77	87
62	59	61
72	72	78
63	49	65
42	26	25
—	—	—
53	58	59
72	72	71
74	67	59
71	66	72
62	60	61
62	61	63

In.	In.	In.
*287	*313	*338
*409	*398	*425
*571	*577	*563
—	—	—
*496	*473	*419
*276	*256	*332
*284	*272	*302
*460	*481	*332
*492	*518	*295
*531	*476	*319
—	—	—
*201	*193	*179
*141	*148	*145
*366	*408	*491
*492	*433	*323
*681	*655	*555
*695	*679	*586
—	—	—
*659	*676	*618
*579	*597	*556
*436	*413	*313
*518	*509	*459
*486	*381	*334
*260	*203	*197
—	—	—
*589	*608	*595
*638	*657	*552
*551	*508	*441
*590	*570	*573
*563	*543	*568
*471	*461	*447

HUMIDITY OF THE AIR, AND TENSION OF THE ATMOSPHERIC VAPOUR.

12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly Means.
6	7	8	9	10	11	12	13	14	15	16	17	
60	59	71	75	79	81	90	88	88	85	83	88	64
66	71	81	79	84	82	80	90	92	93	93	93	76
84	81	90	94	95	97	—	—	—	—	—	—	87
—	—	—	—	—	—	81	82	83	84	90	97	84
85	82	77	78	90	89	84	96	90	91	96	91	74
55	59	62	61	65	90	90	88	86	89	96	97	59
50	41	53	55	54	56	59	66	77	69	73	71	82
79	82	88	88	90	93	91	95	95	97	97	97	70
76	72	59	58	57	56	60	61	59	82	82	82	73
71	59	67	75	77	73	—	—	—	—	—	—	55
—	—	—	—	—	—	75	74	76	79	81	79	50
41	45	51	71	69	61	81	86	72	72	72	71	79
32	39	40	41	57	77	78	86	87	80	80	79	50
70	81	84	84	86	87	87	87	92	91	91	95	63
39	41	71	72	75	82	84	80	77	58	76	87	74
58	67	68	86	88	89	90	91	96	95	96	96	83
78	81	87	80	89	89	—	—	—	—	—	—	88
—	—	—	—	—	—	96	98	99	99	99	100	89
82	88	92	91	90	85	86	93	91	93	95	87	78
89	89	91	96	96	97	92	95	96	96	92	97	83
54	61	65	65	83	89	93	90	90	91	96	96	89
75	78	82	79	81	87	89	100	91	96	97	95	82
67	69	76	78	85	82	87	87	88	91	92	90	57
28	36	45	46	56	61	—	—	—	—	—	—	77
—	—	—	—	—	—	85	91	91	97	96	91	86
61	71	79	81	85	87	91	96	95	96	96	97	82
78	80	94	98	97	96	98	100	100	100	100	98	82
66	70	73	77	77	79	89	87	90	93	96	91	78
79	82	95	97	95	93	97	97	96	95	96	86	82
71	74	79	72	88	86	91	98	96	88	88	86	78
65	68	71	76	76	83	86	89	89	89	90	90	75

In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
*303	*288	*266	*239	*255	*267	*264	*260	*249	*247	*227	*236	*243
*321	*437	*419	*392	*439	*463	*470	*444	*461	*490	*531	*423	—
*517	*485	*500	*486	*476	*449	—	—	—	—	—	—	—
—	—	—	—	—	—	*429	*431	*431	*425	*375	*344	*511
385	*378	*328	*326	*338	*323	*297	*298	*283	*280	*281	*288	*384
292	*227	*229	*233	*267	*265	*251	*238	*230	*227	*261	*288	*262
270	*221	*235	*218	*214	*216	*225	*238	*254	*237	*241	*248	*248
*393	*398	*403	*400	*398	*389	*390	*355	*315	*338	*323	*325	*390
599	*447	*373	*366	*348	*334	*341	*336	*318	*387	*378	*385	*428
*531	*414	*402	*417	*362	*315	—	—	—	—	—	—	*403
—	—	—	—	—	—	*262	*248	*240	*234	*232	*224	—
178	*176	*181	*210	*196	*193	*213	*198	*192	*192	*193	*199	*187
150	*171	*173	*170	*207	*233	*231	*237	*230	*205	*203	*198	*179
419	*176	*192	*365	*355	*353	*342	*335	*329	*342	*340	*361	*348
393	*477	*615	*547	*535	*572	*582	*623	*602	*517	*552	*585	*553
729	*652	*622	*602	*604	*595	*575	*546	*540	*507	*478	*482	*620
*671	*591	*567	*540	*557	*552	—	—	—	—	—	—	—
—	—	—	—	—	—	*547	*545	*556	*571	*522	*519	*621
*667	*598	*572	*564	*543	*523	*525	*513	*488	*472	*478	*476	*591
521	*502	*513	*508	*492	*465	*425	*422	*385	*371	*385	*400	*520
397	*396	*370	*360	*384	*379	*363	*358	*361	*366	*371	*386	*419
537	*463	*446	*427	*430	*430	*445	*470	*473	*478	*512	*508	*485
*436	*409	*403	*397	*402	*377	*400	*405	*403	*403	*395	*390	*477
*296	*237	*234	*226	*229	*247	—	—	—	—	—	—	—
—	—	—	—	—	—	*443	*442	*423	*431	*428	*432	*314
502	*491	*471	*453	*477	*499	*497	*496	*477	*428	*428	*463	*535
*580	*641	*665	*634	*615	*570	*573	*632	*623	*621	*632	*676	*613
474	*485	*472	*450	*436	*416	*415	*390	*395	*397	*392	*379	*612
579	*542	*568	*461	*429	*410	*405	*389	*362	*344	*368	*370	*487
*585	*559	*566	*523	*600	*578	*563	*550	*528	*468	*413	*341	*526
445	*429	*424	*404	*405	*401	*403	*401	*391	*382	*381	*386	*434

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JANUARY.	1	E.	1 <sup>5</sup>	E.	1 <sup>5</sup>	E.	1 <sup>5</sup>	E.	1 <sup>5</sup>	E.	1 <sup>5</sup>	E.	1 <sup>5</sup>
	2	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by S.	0 <sup>5</sup>	S.W. by S.	2 <sup>0</sup>
	3	N.W.	0 <sup>5</sup>	N.W.	0 <sup>2</sup>	W.N.W.	0 <sup>2</sup>	N.W. by W.	0 <sup>2</sup>	—	—	W. by S.	0 <sup>2</sup>
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	S.W. by S.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	W. by S.	0 <sup>2</sup>
	6	N. by E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>
	7	E.	3 <sup>0</sup>	E.	3 <sup>0</sup>	E.	2 <sup>5</sup>	E. by N.	2 <sup>0</sup>	E.	1 <sup>0</sup>	E.	1 <sup>0</sup>
	8	—	0 <sup>0</sup>	W.S.W.	0 <sup>5</sup>	W.S.W.	0 <sup>5</sup>	W.S.W.	0 <sup>5</sup>	W. by S.	0 <sup>5</sup>	W. by S.	0 <sup>5</sup>
	9	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W. by N.	0 <sup>5</sup>	W.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>
	10	S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	S.W. by W.	0 <sup>5</sup>	S.W. by W.	0 <sup>5</sup>	S.W. by W.	0 <sup>5</sup>	S.W. by W.	1 <sup>0</sup>
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>
	13	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W.	0 <sup>2</sup>	N.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W.N.W.	0 <sup>2</sup>
	14	S.W.	1 <sup>0</sup>	S.W.	1 <sup>0</sup>	S.W.	1 <sup>0</sup>	S.W.	1 <sup>0</sup>	S.W. by W.	0 <sup>5</sup>	S.W. by W.	0 <sup>2</sup>
	15	—	0 <sup>0</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>
	16	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>
	17	N.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N.W. by N.	1 <sup>0</sup>
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>
	20	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	21	N.N.E.	1 <sup>0</sup>	N.E.	1 <sup>0</sup>	N.E.	1 <sup>0</sup>	N.E.	1 <sup>0</sup>	N.N.E.	1 <sup>0</sup>	N.N.E.	1 <sup>0</sup>
	22	N.N.W.	1 <sup>0</sup>	N.N.W.	1 <sup>5</sup>	N.N.W.	1 <sup>5</sup>	N.N.W.	—	N.N.W.	2 <sup>5</sup>	N.N.W.	2 <sup>5</sup>
	23	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>
	24	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>5</sup>
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	27	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	28	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W. by W.	0 <sup>5</sup>	S.W. by W.	0 <sup>2</sup>	W. by S.	0 <sup>5</sup>
	29	E.S.E.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>
	30	E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	31	N. by W.	3 <sup>0</sup>	N. by W.	3 <sup>5</sup>	N. by W.	3 <sup>5</sup>	N. by W.	3 <sup>5</sup>	N. by W.	2 <sup>5</sup>	N. by W.	2 <sup>0</sup>

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JANUARY.	1	E.	1 <sup>5</sup>	E.	1 <sup>0</sup>	E.	1 <sup>0</sup>	E.	0 <sup>5</sup>	E.	0 <sup>5</sup>	E.S.E.	0 <sup>5</sup>
	2	W. by N.	1 <sup>0</sup>	W. by N.	0 <sup>5</sup>	W.	0 <sup>5</sup>	W.	0 <sup>5</sup>	W.	1 <sup>5</sup>	W.	1 <sup>0</sup>
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	6	E.N.E.	1 <sup>0</sup>	E.N.E.	1 <sup>5</sup>	E.N.E.	2 <sup>5</sup>	E.N.E.	2 <sup>5</sup>	E.N.E.	2 <sup>5</sup>	E.N.E.	3 <sup>5</sup>
	7	N.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>
	8	W.N.W.	1 <sup>0</sup>	W.N.W.	0 <sup>2</sup>	W.N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	9	—	0 <sup>0</sup>	W.N.W.	0 <sup>2</sup>	W.N.W.	0 <sup>2</sup>	N.W. by W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	10	S.W.	1 <sup>5</sup>	S.W.	1 <sup>0</sup>	W.S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N.W. by N.	0 <sup>2</sup>	N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.W. by N.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>
	13	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	1 <sup>0</sup>	S.W.	1 <sup>5</sup>	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>
	14	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	15	W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W.N.W.	0 <sup>2</sup>
	16	N. by W.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>	N.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>
	17	N.W.	2 <sup>0</sup>	N.N.W.	2 <sup>5</sup>	N.W. by N.	1 <sup>5</sup>	N.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	0 <sup>0</sup>	N.E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>
	20	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>
	21	N. by W.	0 <sup>5</sup>	N.	0 <sup>5</sup>	N.	3 <sup>0</sup>	N. by W.	2 <sup>5</sup>	N. by W.	3 <sup>0</sup>	N.N.W.	2 <sup>5</sup>
	22	N.W. by N.	2 <sup>0</sup>	N.W. by N.	1 <sup>5</sup>	N.W. by N.	1 <sup>5</sup>	N.W. by N.	1 <sup>5</sup>	N.W. by N.	0 <sup>5</sup>	N.W. by N.	0 <sup>5</sup>
	23	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>
	24	S.W.	1 <sup>0</sup>	S.W.	1 <sup>0</sup>	S.W.	1 <sup>0</sup>	S.W.	1 <sup>5</sup>	S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	0 <sup>0</sup>	N.E. by E.	0 <sup>5</sup>	N.N.E.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.N.E.	0 <sup>2</sup>
	27	—	0 <sup>0</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W. by W.	0 <sup>5</sup>	S.W. by W.	0 <sup>5</sup>
	28	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	29	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.S.E.	0 <sup>5</sup>	E.S.E.	0 <sup>2</sup>	—	0 <sup>0</sup>
	30	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N. by W.	3 <sup>0</sup>
	31	N.E. by N.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>



DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		
Force.	Direction.	Force.
1.5	E.	1.5
0.5	S.W. by S.	2.0
0.0	W. by S.	0.2
0.2	W. by S.	0.2
0.2	N.E.	0.2
1.0	E.	1.0
0.5	W. by S.	0.5
0.5	N.N.W.	0.5
0.5	S.W. by W.	1.0
0.2	N.N.W.	0.5
0.2	W.N.W.	0.2
0.5	S.W. by W.	0.2
0.2	S. by W.	0.2
0.2	N. by W.	0.2
0.2	N.W. by N.	1.0
0.2	N. by W.	0.2
0.0	—	0.0
1.0	N.N.E.	1.0
2.5	N.N.W.	2.5
0.0	S.W.	0.2
0.2	S.W.	0.5
0.0	—	0.0
0.0	—	0.0
0.2	W. by S.	0.5
0.2	E.S.E.	0.2
0.0	—	0.0
2.5	N. by W.	2.0

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
E.	1.5	E.	1.5	E.	1.5	E.	1.5	E.	2.5	E.	2.0	1
S.W. by S.	2.5	S.W.	1.0	S.W.	0.5	S.W.	0.5	S.W.	0.5	S.W. by W.	0.2	2
W. by S.	0.2	W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.	0.2	—	0.0	3
—	—	—	—	—	—	—	—	—	—	—	—	4
W.	0.2	W.	0.2	S.S.W.	0.2	S. by W.	0.2	—	0.0	—	0.0	5
N.E.	0.2	N.E. by N.	0.5	E.N.E.	0.5	N.E. by E.	0.5	E.N.E.	0.5	E.N.E.	1.0	6
E.	1.0	E.	1.0	E.	0.5	E.	0.5	N.N.E.	0.5	N. by E.	0.2	7
W. by S.	0.5	W.	1.5	W.	0.5	W. by N.	1.0	W. by N.	1.0	W. by N.	1.0	8
N.N.W.	0.5	N.W. by W.	0.5	N.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	—	0.0	9
W.S.W.	1.5	W.S.W.	1.0	S.W.	1.0	S.W.	2.0	S.W.	2.5	S.W.	2.5	10
—	—	—	—	—	—	—	—	—	—	—	—	11
N.W.	0.2	N.	0.2	N. by W.	0.2	N.	0.2	N.W. by N.	0.2	N.W. by N.	0.2	12
W. by N.	0.5	W.	0.5	W.	0.5	W.	0.5	W. by N.	0.5	W. by S.	0.2	13
W.S.W.	0.5	W.S.W.	0.5	W. by S.	0.5	W.	0.2	W.S.W.	0.2	—	0.0	14
S. by W.	0.2	S. by W.	0.2	S.W.	0.5	S.W.	0.2	S.W.	0.2	—	0.0	15
N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	N. by W.	0.5	N.	0.5	N.	0.5	16
N.N.W.	2.5	N.N.W.	2.5	N.N.W.	2.0	N.N.W.	1.5	N.N.W.	2.5	N.N.W.	2.5	17
—	—	—	—	—	—	—	—	—	—	—	—	18
N.	0.2	N.	0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	N.E.	0.2	19
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
N.E. by N.	1.0	N.N.E.	0.5	N.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	1.0	21
N.W. by N.	2.5	N.W. by N.	2.5	N.N.W.	1.5	N.W.	2.0	N.W.	2.5	N.W.	3.5	22
S.S.W.	0.2	S.S.W.	0.2	S.W. by S.	0.2	S.S.W.	0.2	S.W.	0.2	—	0.0	23
S.W.	0.5	S.W.	1.5	S.W.	2.5	S.W.	1.5	S.S.W.	1.0	S.S.W.	1.0	24
—	—	—	—	—	—	—	—	—	—	—	—	25
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26
—	0.0	W.	0.2	S. by W.	0.2	S. by W.	0.2	S.S.W.	0.2	S.W.	0.2	27
W. by S.	0.5	W. by S.	0.5	W.S.W.	0.2	W.S.W.	0.2	S.W.	0.2	S.W.	0.2	28
E.S.E.	0.2	E.N.E.	0.2	E.	0.2	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	29
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30
N.	1.0	N.	0.5	N. by E.	0.5	N.	0.5	N.N.E.	0.5	N.E.	0.2	31

JANUARY.

17 <sup>h</sup> .		
Force.	Direction.	Force.
0.5	E.S.E.	0.5
1.5	W.	1.0
0.0	—	0.0
0.0	—	0.0
2.5	E.N.E.	3.5
0.2	S.W.	0.2
0.0	—	0.0
0.0	—	0.0
0.5	S.W.	0.5
0.2	N.W.	0.2
0.2	—	0.0
0.0	—	0.0
0.0	W.N.W.	0.2
0.5	N. by W.	0.5
0.0	N.	0.0
0.2	N. by E.	0.2
0.2	N. by E.	0.0
3.0	N.N.W.	2.5
0.5	N.W. by N.	0.5
0.2	W.S.W.	0.2
0.5	S.W.	0.5
0.0	N.N.E.	0.2
0.5	S.W. by W.	0.5
0.0	—	0.0
0.2	S.W. by W.	0.2
0.0	S. by E.	0.2
0.0	—	0.0
0.2	N. by W.	0.2
0.0	—	0.0

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
E.S.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1
W.	1.0	W.N.W.	3.0	N.W.	2.0	N.W.	1.0	N.W.	1.0	N.W.	1.0	2
—	—	—	—	—	—	—	—	—	—	—	—	3
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.W.	0.2	4
—	0.0	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	5
E.N.E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	3.5	E.N.E.	3.5	E.N.E.	3.5	6
W.S.W.	0.2	W. by S.	0.2	W.S.W.	0.2	S.W.	0.2	W. by S.	0.2	W. by S.	0.2	7
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
—	0.0	—	0.0	—	0.0	—	0.0	S.W. by W.	0.5	S.W. by W.	0.2	9
N.W. by N.	0.5	N.W. by N.	0.5	N.N.W.	0.5	N. by W.	0.5	N. by W.	0.5	—	0.0	10
N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
S.W.	0.2	—	0.0	S.W. by S.	1.5	S.W. by S.	1.5	S.W. by S.	2.0	S.W.	2.0	12
—	0.0	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	W. by S.	0.2	13
N. by W.	0.2	N.	0.2	N. by E.	0.2	N.	0.2	N. by E.	0.2	N. by W.	0.2	14
N.	0.5	—	0.0	N. by W.	0.2	N. by W.	0.2	—	0.0	—	0.0	15
—	—	—	—	—	—	—	—	—	—	—	—	16
N.	0.5	N.	0.5	N.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	17
N. by E.	0.2	N.	0.2	N.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	18
N. by E.	0.2	N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	1.0	19
N.N.W.	2.0	N. by W.	2.5	N.	1.5	N.N.W.	2.5	N.	1.5	N.N.W.	1.0	20
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
S.W. by W.	0.2	—	0.0	S.W. by W.	0.2	S.W.	0.5	W.S.W.	0.5	S.W.	0.2	22
—	—	—	—	—	—	—	—	—	—	—	—	23
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	24
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25
S.W. by W.	0.5	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	26
—	0.0	S. by E.	0.2	—	0.0	—	0.0	E.S.E.	0.2	—	0.0	27
—	0.0	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E. by N.	0.2	28
N. by W.	2.5	N. by W.	3.0	N. by W.	3.0	N. by W.	3.0	N. by W.	3.0	N. by W.	3.0	29
—	—	—	—	—	—	—	—	—	—	—	—	30
—	—	—	—	—	—	—	—	—	—	—	—	31

JANUARY.



DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
0.2	S.W.	0.2	S.S.W.	0.2	S.W.	0.2	S.S.W.	0.2	S.W.	0.2	S.S.W.	0.2	S.S.W.	2
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	W. by S.	3
0.2	S.S.W.	0.5	S.S.W.	0.5	S. by W.	0.5	S.	0.5	S. by W.	0.5	S.S.W.	3.0	S.S.W.	4
2.5	W.N.W.	4.0	W.N.W.	3.0	W.N.W.	2.5	W.N.W.	2.5	W.N.W.	1.5	W.N.W.	1.5	W.N.W.	5
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	S.	6
0.2	S. by W.	0.2	S. by W.	0.5	S.S.W.	1.0	S.W. by S.	1.5	S.W.	0.5	S.W.	0.5	S.W.	7
—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
2.0	N.N.W.	2.5	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	0.5	N.N.W.	0.2	N.	9
0.0	N.E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	1.0	E.	1.0	E.	10
0.5	N.E.	0.5	N.E.	0.5	N.E.	0.5	N.E. by N.	0.5	N.E. by N.	0.2	N.N.E.	0.5	N.	11
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	12
0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	—	0.0	W.S.W.	0.2	W.	0.2	—	13
0.0	—	0.0	—	0.2	E.	0.2	—	0.0	N.E.	0.2	N.E.	0.2	N.E.	14
0.2	E.S.E.	0.2	E.S.E.	0.5	E. by S.	0.5	—	0.2	E.	0.5	E.	0.5	N.E.	15
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	16
0.0	N.W. by N.	0.2	W.N.W.	0.2	W.N.W.	0.2	N.	0.2	N.	0.2	S.	0.2	—	17
2.0	E.	2.5	E.	3.5	E.	3.5	E.	3.5	E.N.E.	3.5	E.N.E.	4.5	E.	18
3.0	E.S.E.	3.0	E. by S.	1.0	E.S.E.	0.2	E. by S.	0.2	—	0.0	—	—	—	19
2.0	W.S.W.	2.0	S.W.	2.5	S.S.W.	3.0	S.W.	3.0	S.W.	3.0	W.S.W.	2.0	S.W.	20
—	—	—	—	—	—	—	—	—	—	—	—	—	—	21
0.5	S.W.	1.0	S.W.	1.0	S.W. by S.	2.5	S.W.	2.5	S.W.	2.5	W.S.W.	3.0	W.S.W.	22
0.2	N.	0.2	W. by S.	0.5	W. by N.	1.5	W. by N.	1.0	W. by N.	1.5	W. by N.	—	W.N.W.	23
0.2	W.N.W.	0.2	W.	0.2	W.	0.2	W.	0.2	N.	0.2	N.	0.2	—	24
0.2	N.W. by N.	0.2	W.N.W.	0.2	W.N.W.	0.2	N.	0.2	N.	0.2	N.	0.2	N.N.W.	25
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	26
1.5	N.E.	1.0	N.E.	1.5	N.E. by E.	1.5	E.N.E.	1.5	E.N.E.	1.0	E.N.E.	0.2	E.N.E.	27
—	—	—	—	—	—	—	—	—	—	—	—	—	—	28
—	—	—	—	—	—	—	—	—	—	—	—	—	—	29

FEBRUARY.

17 <sup>h</sup> .		18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		
lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	
—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
0.2	S.	0.2	S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	2
1.0	N.W.	2.0	N.W.	0.5	N.W.	0.5	N.W. by W.	1.5	N.W. by W.	0.5	W.N.W.	1.5	W.	3
3.5	S.W. by W.	3.5	S.W. by W.	3.0	W.S.W.	1.5	W.S.W.	2.5	W.S.W.	1.5	W. by S.	1.0	—	4
0.2	W. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	5
0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E. by E.	0.2	—	0.0	—	6
4.5	N.W.	7.0	—	—	—	—	—	—	—	—	—	—	—	7
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	8
0.5	E.N.E.	0.5	E.	0.5	E. by N.	0.5	N.E. by N.	0.5	N.E.	0.5	N.E. by E.	1.0	E.N.E.	9
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	10
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	11
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	12
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N. by E.	13
4.0	E.N.E.	4.0	—	—	—	—	—	—	—	—	—	—	—	14
—	—	0.0	—	0.0	—	0.0	—	0.0	N.W.	0.2	N.W. by W.	0.2	—	15
0.5	E.N.E.	0.5	N.E.	0.5	N.E. by N.	0.2	N.E. by N.	0.2	N.	0.2	N. by E.	0.2	N. by E.	16
0.0	N.	0.2	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	17
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	18
5.0	E.	5.0	E. by S.	5.0	E. by S.	5.5	E. by S.	5.0	E. by S.	4.5	E. by S.	4.5	E. by S.	19
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	20
0.5	W. by S.	0.2	—	—	—	—	—	—	—	—	—	—	—	21
—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	22
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	23
0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	—	0.0	—	24
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	25
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	26
0.2	N.N.E.	0.2	N.E. by N.	0.2	N.N.E.	0.2	N.N.E.	0.5	N.N.E.	1.0	N.N.E.	1.0	N.E.	27
0.5	N.E. by E.	0.2	—	—	—	—	—	—	—	—	—	—	—	28
—	—	—	—	0.2	N.E.	0.2	N.E.	0.5	N.N.E.	0.2	N.N.E.	0.2	—	29

FEBRUARY.

DIRECTION AND FORCE OF THE WIND.													
Mean Gettingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
MARCH.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	N.E. by N.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E. by E.	0 <sup>5</sup>	N.E. by E.	0 <sup>5</sup>	N.E. by E.	0 <sup>5</sup>
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E. by N.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	4	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>5</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>5</sup>
	5	W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W. by N.	0 <sup>2</sup>	W. by N.	0 <sup>2</sup>
	6	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.N.E.	1 <sup>0</sup>	E.	1 <sup>5</sup>	E. by N.	1 <sup>0</sup>
	7	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E. by N.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>
	10	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N.E. by E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	11	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	12	E.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	13	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	14	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	W.S.W.	0 <sup>5</sup>	W.S.W.	0 <sup>5</sup>
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	W.N.W.	1 <sup>0</sup>	W. by N.	0 <sup>5</sup>	W.	2 <sup>5</sup>	W.	1 <sup>5</sup>	W.	1 <sup>0</sup>	W.	0 <sup>5</sup>
	17	N.W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>
	18	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by W.	0 <sup>2</sup>	S.	0 <sup>2</sup>
	19	—	0 <sup>0</sup>	N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>
	20	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>
	21	W.N.W.	0 <sup>5</sup>	N.W. by W.	0 <sup>5</sup>	N.W. by W.	1 <sup>0</sup>	W.N.W.	1 <sup>5</sup>	W. by N.	2 <sup>5</sup>	N.W.	1 <sup>5</sup>
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	E. by N.	0 <sup>5</sup>	E.N.E.	0 <sup>5</sup>	E.N.E.	0 <sup>5</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>
	24	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>5</sup>	E. by N.	0 <sup>5</sup>	E.N.E.	1 <sup>0</sup>
	25	E.N.E.	1 <sup>0</sup>	E.N.E.	1 <sup>0</sup>	E.N.E.	1 <sup>0</sup>	E.N.E.	0 <sup>5</sup>	E.N.E.	0 <sup>5</sup>	E.N.E.	0 <sup>2</sup>
	26	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S. by E.	0 <sup>5</sup>	S.S.E.	0 <sup>5</sup>	S.S.E.	0 <sup>5</sup>
	27	S.S.E.	0 <sup>2</sup>	S.	0 <sup>5</sup>	S.	0 <sup>5</sup>	S.	0 <sup>5</sup>	S.S.W.	0 <sup>5</sup>	S.S.W.	0 <sup>5</sup>
	28	S.W. by W.	0 <sup>2</sup>	S.W. by W.	0 <sup>2</sup>	—	0 <sup>0</sup>	W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>5</sup>
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W.N.W.	0 <sup>2</sup>	W.N.W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W.N.W.	0 <sup>2</sup>
	31	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W. by W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>

(continued)

Mean Gettingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
MARCH.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	E. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	4	S.W.	0 <sup>5</sup>	W.S.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	5	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>
	6	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E.	0 <sup>2</sup>
	7	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W. by N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	10	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	11	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	12	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	13	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	14	W.S.W.	0 <sup>5</sup>	W. by S.	1 <sup>0</sup>	W. by S.	1 <sup>0</sup>	W.S.W.	1 <sup>0</sup>	S.W.	0 <sup>5</sup>	S.W. by W.	0 <sup>5</sup>
	15	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	16	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	17	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>
	18	—	0 <sup>0</sup>	W. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	19	—	0 <sup>0</sup>	W.N.W.	0 <sup>2</sup>	W.N.W.	0 <sup>5</sup>	W.N.W.	0 <sup>5</sup>	W.N.W.	0 <sup>2</sup>	W. by N.	2 <sup>0</sup>
	20	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	21	W.N.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.N.E.	0 <sup>2</sup>
	24	E. by N.	3 <sup>5</sup>	E. by N.	3 <sup>5</sup>	E.	4 <sup>5</sup>	E.N.E.	4 <sup>5</sup>	E.	4 <sup>5</sup>	E.	4 <sup>0</sup>
	25	—	0 <sup>0</sup>	S.W. by S.	0 <sup>2</sup>	S.S.W.	0 <sup>5</sup>	S.	0 <sup>5</sup>	S.S.W.	0 <sup>5</sup>	S.S.W.	0 <sup>5</sup>
	26	—	0 <sup>0</sup>	S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	27	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>
	28	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>5</sup>	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>5</sup>	W.S.W.	0 <sup>5</sup>	S.W. by W.	0 <sup>5</sup>
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	31	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>

DIRECTION AND FORCE OF THE WIND.

4 <sup>h</sup> .		5 <sup>h</sup> .		6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
0.5	N.E. by E.	0.5	—	N.E. by E.	0.5	E. by N.	0.5	E.S.E.	0.5	E. by S.	0.5	E. by S.	0.5	E. by S.	0.2	2
0.2	E.	0.2	—	E. by S.	0.2	E.	0.2	S.E. by S.	0.5	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	3
0.2	S.S.W.	0.5	—	S.W. by S.	0.5	S.S.W.	0.2	S. by W.	0.2	S. by W.	0.5	S. by W.	2.5	—	2.0	4
0.2	W. by N.	0.2	—	S.W.	0.2	S.S.W.	0.2	W.N.W.	0.2	S.W. by W.	0.2	W.	0.2	W.N.W.	0.2	4
1.5	E. by N.	1.0	—	E. by N.	0.5	E. by N.	0.2	E.	0.2	—	—	—	—	E.S.E.	0.2	6
0.0	—	0.0	—	S. by E.	0.2	S.S.E.	0.2	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	—	0.0	7
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
0.2	S.S.W.	0.2	—	S.S.W.	0.2	S. by W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	—	0.0	9
0.2	E.	0.2	—	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	—	0.0	10
0.2	E.	0.2	—	E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.N.E.	0.2	E.N.E.	0.2	11
0.2	E.	0.2	—	E.	0.2	—	—	—	—	—	—	E.	0.2	—	0.0	12
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	0.0	13
0.5	W.S.W.	0.5	—	W.S.W.	1.5	S.W.	1.5	S.W. by S.	1.0	S.W. by S.	1.0	W.S.W.	2.0	W.S.W.	0.5	14
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15
1.0	W.	0.5	—	W.	0.5	N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N. by W.	1.0	16
0.5	N.N.W.	0.5	—	N.W.	0.5	N.W. by W.	0.5	W.N.W.	0.5	N.W.	0.5	S.S.W.	0.2	—	0.0	17
0.2	S.	0.2	—	—	0.0	—	—	—	0.0	—	—	E.	0.2	E.	0.2	18
0.2	E. by S.	0.2	—	E.	0.2	—	—	—	0.0	—	—	—	0.0	—	0.0	19
0.2	E.S.E.	0.2	—	S.E. by E.	0.2	—	—	—	0.0	—	—	S.W. by S.	0.2	—	0.0	20
2.5	N.W.	1.5	—	W. by N.	1.5	W. by N.	1.5	N.N.W.	1.5	N.W.	1.5	N.W.	1.5	W.N.W.	1.5	21
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22
0.2	E. by N.	0.2	—	E.	0.2	—	—	E.	0.2	—	—	—	0.0	—	0.0	23
0.5	E.N.E.	1.0	—	E.N.E.	1.0	E.N.E.	0.5	E. by N.	1.0	E.	1.0	E. by S.	1.5	E. by N.	3.0	24
0.5	E.N.E.	0.2	—	—	0.0	S.	0.2	—	0.0	—	—	—	0.0	—	0.0	25
0.5	S.S.E.	0.5	—	S.E. by S.	0.5	S.E.	0.2	S.E. by E.	0.2	E. by S.	0.5	E. by S.	0.5	S.	0.2	26
0.5	S.S.W.	0.5	—	S.S.W.	0.5	S. by W.	0.2	S. by W.	0.5	S.S.W.	0.2	—	0.0	—	0.0	27
0.2	W.S.W.	0.5	—	S.W.	0.5	—	—	S.S.W.	0.2	S.W. by S.	0.5	S.W.	0.5	W. by S.	0.2	28
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29
0.2	W.N.W.	0.2	—	S.W.	0.2	S. by W.	0.5	S.W. by S.	0.5	S.W.	0.5	S.W.	0.5	W.	0.2	30
0.2	N.N.W.	0.5	—	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.5	S. by S.	0.5	S.S.E.	0.2	—	0.0	31

MARCH.

16 <sup>h</sup> .		17 <sup>h</sup> .		18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	2
0.0	—	0.0	—	S.W. by S.	0.2	—	—	—	—	—	—	—	—	—	—	3
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	—	4
0.2	N.W.	0.2	—	W.N.W.	0.2	—	—	—	—	W.S.W.	0.2	W.	0.2	W.	0.2	5
0.0	N.E.	0.2	—	—	0.0	—	—	—	—	W. by N.	0.2	W. by N.	0.2	—	0.0	6
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	—	7
—	—	—	—	N.	1.0	—	—	N. by E.	0.5	N. by W.	1.0	N.	0.5	—	0.0	8
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	9
0.0	—	0.0	—	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	—	—	—	0.0	10
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	11
0.2	E.	0.2	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	12
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	13
0.5	S.W. by W.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	14
—	—	—	—	W.N.W.	0.2	W.	1.0	W.	0.2	W. by S.	0.5	S.W. by W.	0.2	W. by S.	1.0	15
0.0	—	0.0	—	N.N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.5	16
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	17
0.2	N.E. by N.	0.2	—	N.E. by N.	0.2	N.N.E.	0.2	—	—	—	—	—	—	—	0.0	18
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	19
0.2	W. by N.	2.0	—	N.W. by W.	0.2	W. by N.	1.0	W.	0.2	W.	1.0	W.	0.2	W.N.W.	0.2	20
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	21
—	—	—	—	N.E. by E.	0.2	N.E.	0.2	E.N.E.	0.2	E.N.E.	1.0	E.N.E.	0.5	E. by N.	0.5	22
0.0	E.N.E.	0.2	—	E.N.E.	0.2	E. by N.	0.2	E.N.E.	0.2	N.E.	0.2	—	—	—	0.0	23
4.5	E.	4.0	—	E.	4.0	E.	4.5	E.	4.0	E.	3.0	E.	2.5	E.	2.0	24
0.5	S.S.W.	0.5	—	S.S.W.	0.2	S. by W.	0.2	S. by W.	0.2	—	—	—	—	—	0.0	25
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	S.	0.2	26
0.2	W.S.W.	0.2	—	W.S.W.	0.2	S.W.	0.2	S.W.	0.2	—	—	—	—	S.W.	0.2	27
0.5	S.W. by W.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—	28
—	—	—	—	W. by S.	0.2	W. by S.	0.2	—	—	—	—	—	—	—	0.0	29
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	30
0.0	—	0.0	—	—	0.0	—	—	—	—	—	—	—	—	—	0.0	31

MARCH.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Dir.	Force.	Direction.	Force.	
APRIL.	1	—	0'0	—	0'0	—	0'0	S.E.	0'2	E.S.E.	0'5	S.E.	0'5
	2	N.N.E.	0'2	N.E.	0'2	E. by N.	0'2	E.	1'0	E. by N.	1'0	E. by S.	0'5
	3	N.N.E.	0'2	N.E. by E.	0'2	E. by S.	0'5	E.	0'5	E.	0'2	E.	0'2
	4	—	0'0	E.	0'2	E.	0'2	E.	0'5	E.	0'5	E.	0'5
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	N. by W.	0'5	N. by W.	0'2	N. by E.	0'2	N.	0'2	E.	0'2	E.	0'2
	7	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	8	W. by S.	2'5	W. by S.	3'0	W.	3'0	W.S.W.	3'0	W. by S.	2'5	W.S.W.	2'5
	9	—	0'0	—	0'0	W.S.W.	0'2	S. by W.	0'2	S.	0'5	S.	0'5
	10	—	—	—	—	—	—	—	—	—	—	—	—
	11	—	0'0	—	0'0	—	0'0	S.W. by S.	0'5	S.W. by S.	1'0	W.S.W.	2'5
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N. by E.	0'2	N.	0'2	N. by W.	0'2	N.N.W.	0'5	N.W. by N.	1'5	N. by W.	0'5
	14	—	0'0	S.W. by W.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	1'0	S.S.W.	2'0
	15	N.N.W.	2'5	N.N.W.	2'5	N.N.W.	2'5	N.N.W.	2'5	N. by W.	2'0	W.N.W.	1'5
	16	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	E.S.E.	0'5
	17	—	0'0	—	0'0	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2
	18	N.W.	0'5	W.N.W.	0'5	W.S.W.	0'5	S.S.E.	0'2	S.W. by S.	0'5	S.S.W.	0'5
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	0'0	—	0'0	S.W. by S.	0'2	S.	0'5	S.	0'2	S.	0'2
	21	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.S.W.	0'2
	22	E.	0'2	E. by N.	—	E.N.E.	0'2	E.	0'2	E.	0'2	E.	0'2
	23	N.N.E.	0'2	—	0'0	N.E. by N.	0'2	E.S.E.	0'2	E.	0'2	E.N.E.	1'0
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	E.	0'5	E.S.E.	0'5	E.	0'5	E.	0'5	E.	0'2	E.	0'2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	0'0	—	0'0	N. by E.	0'2	S.E. by S.	0'2	S. by W.	0'2	S. by E.	0'2
	28	N.E. by N.	0'2	E.N.E.	0'5	E.	1'0	E.N.E.	1'0	E.N.E.	1'5	E. by N.	2'5
	29	E. by N.	2'0	E.N.E.	1'0	E.N.E.	1'0	E.N.E.	1'0	N.E. by E.	1'0	N.E. by E.	1'0
	30	E.N.E.	0'2	E.N.E.	0'2	E. by S.	0'2	E. by S.	0'2	E.N.E.	0'2	E. by N.	0'2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	1'5	E. by N.	0'5	E.N.E.	0'2	E. by N.	0'0
	5	—	—	—	—	—	—	—	—	—	—	—	
	6	E.N.E.	0'2	E.N.E.	0'2	E. by N.	0'5	E. by N.	0'5	E. by N.	1'0	E.N.E.	1'0
	7	S.W.	0'5	S.S.W.	1'5	S.S.W.	2'0	S.W.	2'0	W.	1'0	W. by S.	1'5
	8	W.	1'5	W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	9	E.	0'2	—	0'0	N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0
	10	—	—	—	—	—	—	—	—	—	—	—	
	11	W.	2'5	W.	1'5	W.	1'0	W.N.W.	0'5	N.W. by N.	0'5	N.W. by N.	0'5
	12	—	—	—	—	—	—	—	—	—	—	—	
	13	N.W. by W.	2'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	14	W.S.W.	2'0	W.S.W.	1'0	W.S.W.	0'5	S.W.	0'5	S.W.	0'2	N.W.	0'2
	15	S. by E.	0'2	S.S.E.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	
	16	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	
	17	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	
	18	N.W.	2'5	N.W.	3'5	S.W.	1'0	W.	0'2	S.W. by S.	0'2	—	
	19	—	—	—	—	—	—	—	—	—	—	—	
	20	S.W.	0'5	S.W.	0'2	—	0'0	S.W.	0'2	—	0'0	—	
	21	N.N.W.	2'0	N.N.W.	1'0	N. by W.	0'5	E.N.E.	0'2	E. by S.	0'2	N.E.	0'2
	22	—	0'0	—	0'0	S.W.	0'2	—	0'0	—	0'0	—	
	23	E.N.E.	0'2	—	0'0	—	0'0	E.	0'2	E. by N.	0'2	E.N.E.	0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	25	E.N.E.	0'2	—	0'0	—	0'0	N.E. by E.	0'2	N.E. by E.	0'2	E.N.E.	0'2
	26	—	—	—	—	—	—	—	—	—	—	—	
	27	S.S.W.	0'2	—	0'0	—	0'0	N.W. by N.	0'2	N. by W.	0'2	N. by W.	0'2
	28	E.	3'0	E.	2'5	E.	2'0	E.	2'0	E.	1'0	E.	0'2
	29	E. by N.	0'2	E. by N.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	—	
	30	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		
Force.	Direction.	Force.
0.5	S.E.	0.5
1.0	E. by S.	0.5
0.2	E.	0.2
0.5	E.	0.5
—	—	—
0.2	E.	0.2
0.0	—	0.0
2.5	W.S.W.	2.5
0.5	S.	0.5
—	—	—
1.0	W.S.W.	2.5
—	—	—
1.5	N. by W.	0.5
1.0	S.S.W.	2.0
2.0	W.N.W.	1.5
0.2	E.S.E.	0.5
0.2	E.S.E.	0.2
0.5	S.S.W.	0.5
—	—	—
0.2	S.	0.2
0.2	S.S.W.	0.2
0.2	E.	0.2
0.2	E.N.E.	1.0
0.0	—	0.0
0.2	E.	0.2
—	—	—
0.2	S. by E.	0.2
1.5	E. by N.	2.5
1.0	N.E. by E.	1.0
0.2	E. by N.	0.2

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
S. by E.	0.5	S.S.W.	0.5	S. by W.	0.2	S. by W.	0.2	S. by E.	0.2	—	0.0	1
E. by S.	0.5	E.	1.0	E.	0.5	E. by S.	0.5	E.	0.5	E.	0.2	2
E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	—	0.0	3
E.	0.5	E.	0.5	E.	0.2	N.E. by E.	0.2	E. by N.	0.2	E.N.E.	0.2	4
—	—	—	—	—	—	—	—	—	—	—	—	5
E. by S.	0.5	E. by N.	0.5	E.	0.5	E.	0.5	E. by N.	0.5	E. by N.	0.2	6
S. by E.	0.2	S.W.	0.5	S.W. by S.	0.2	S.S.W.	0.5	S.W.	1.5	S.W.	1.5	7
W.S.W.	3.0	W.S.W.	3.0	W.	3.5	W.	3.0	W.	2.5	W.	2.5	8
S. by E.	0.5	S.E.	0.5	S.E. by S.	0.5	E.S.E.	0.5	E. by S.	0.5	E.	0.5	9
—	—	—	—	—	—	—	—	—	—	—	—	10
W. by S.	4.0	W.	5.5	W.	5.5	W.	5.5	W. by S.	4.0	W.	3.0	11
—	—	—	—	—	—	—	—	—	—	—	—	12
N.W.	2.0	N.N.W.	2.5	N.N.W.	3.0	N.W.	3.0	N.W.	3.0	N.N.W.	2.5	13
S.S.W.	1.0	S.S.W.	1.0	S.W. by W.	0.5	W.S.W.	2.0	W.S.W.	1.5	W.S.W.	2.0	14
N.N.W.	1.0	N.N.W.	1.0	W.	1.0	W. by S.	1.0	S. by W.	0.5	S. by W.	0.2	15
E. by S.	0.5	E.S.E.	0.5	E.S.E.	0.5	E. by S.	0.5	E.	0.5	E.	0.5	16
E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	17
S.W. by S.	0.5	S.S.W.	1.0	S.S.W.	1.5	S. by W.	1.0	S. by W.	0.2	—	0.0	18
—	—	—	—	—	—	—	—	—	—	—	—	19
S. by E.	0.2	S.	0.2	S.	0.2	S.W. by S.	0.5	S.W.	1.0	S.W.	1.0	20
S.W. by S.	1.0	S.W. by S.	0.5	W.	2.0	N. by W.	3.0	N.N.W.	2.5	N.N.W.	3.0	21
E.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	—	0.0	22
N.E. by E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	0.2	E.N.E.	0.2	23
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	24
E. by S.	0.2	E.	0.2	E.	0.2	E.	0.2	E.N.E.	0.2	E.N.E.	0.2	25
—	—	—	—	—	—	—	—	—	—	—	—	26
S.S.E.	0.2	S.	0.2	S.S.E.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	27
E.N.E.	2.5	N.E. by E.	2.5	E.N.E.	2.0	E. by N.	2.0	E.	2.5	E.N.E.	3.5	28
N.E. by E.	1.0	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	1.0	N.E. by E.	1.0	E.N.E.	0.5	29
E. by S.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2	E.	0.2	E.	0.2	30

APRIL.

17.		
Force.	Direction.	Force.
0.0	—	0.0
0.0	—	0.0
0.2	E. by N.	0.2
0.2	—	0.0
—	—	—
1.0	E.N.E.	1.0
1.0	W. by S.	1.5
0.0	—	0.0
0.2	—	—
—	—	—
0.5	N.W. by N.	0.5
—	—	—
0.0	—	0.0
0.2	N.W.	0.2
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.2	—	0.0
—	—	—
0.0	—	0.0
0.2	N.E.	0.2
0.0	—	0.0
0.2	E.N.E.	0.2
0.0	—	0.0
0.2	E.N.E.	0.2
—	—	—
0.2	N. by W.	0.2
1.0	E.	0.2
0.2	—	0.0
0.0	—	0.0

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	1
—	0.0	N.N.E.	0.2	N.N.E.	0.2	N.E. by N.	0.2	—	0.0	—	0.0	2
—	0.0	—	0.0	—	0.0	E.N.E.	0.2	—	0.0	—	0.0	3
—	—	—	—	—	—	—	—	—	—	—	—	4
—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	N.	0.5	5
E.N.E.	1.0	E.N.E.	0.5	N.E.	0.2	—	0.0	—	0.0	—	0.0	6
W.S.W.	2.5	W.S.W.	2.5	W.S.W.	2.5	W.S.W.	3.0	W. by S.	1.5	W. by S.	3.0	7
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
—	—	—	—	—	—	—	—	—	—	—	—	9
E. by N.	0.2	E.	0.5	E.	0.5	E. by S.	0.2	E.S.E.	0.2	—	0.0	10
—	—	—	—	—	—	—	—	—	—	—	—	11
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12
—	0.0	—	0.0	—	0.0	N.W.	0.2	N.W.	0.2	N.W.	0.2	13
N.W.	0.2	N.W.	2.5	N.W. by W.	3.5	N.W.	2.5	N.N.W.	2.0	N.W.	1.0	14
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.W.	2.0	17
—	—	—	—	—	—	—	—	—	—	—	—	18
N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0	—	0.0	19
—	0.0	—	0.0	—	0.0	W. by S.	0.2	W.S.W.	0.2	—	0.0	20
E.S.E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	E.	0.2	21
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
E.N.E.	0.2	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	23
—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	E.	1.0	E.	1.0	24
—	—	—	—	—	—	—	—	—	—	—	—	25
N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	26
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27
E.	0.2	N.E. by E.	0.2	E.	0.5	N.E.	1.0	N.E.	2.5	E. by N.	3.0	28
—	0.0	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	29
E.N.E.	0.2	E.N.E.	0.2	N.E.	0.2	N.E.	0.5	N.E.	0.2	N.E. by E.	0.2	30

APRIL.







DIRECTION AND FORCE OF THE WIND.													
Mean Götting on Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	—	0 <sup>0</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E by N.	0 <sup>2</sup>	E.N.E.	0 <sup>5</sup>	E. by N.	0 <sup>5</sup>
	3	—	0 <sup>0</sup>	—	—	—	—	—	—	—	—	—	—
	4	—	0 <sup>0</sup>	—	—	S.S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>
	5	N. by W.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	—	—	—	—	—	—
	6	N.W.	0 <sup>5</sup>	N. by W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	—	—	—	—	N.N.W.	0 <sup>2</sup>
	7	—	—	N.W.	0 <sup>5</sup>	N.W.	1 <sup>0</sup>	N.W.	1 <sup>5</sup>	N.W. by N.	0 <sup>5</sup>	N.W. by W.	1 <sup>0</sup>
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>
	10	N.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	S.E.	0 <sup>2</sup>
	11	N. by W.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>5</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>
	12	N.E.	0 <sup>2</sup>	N.E.	0 <sup>5</sup>	E.N.E.	1 <sup>0</sup>	E.	1 <sup>0</sup>	E.	0 <sup>5</sup>	E.	0 <sup>5</sup>
	13	E.N.E.	0 <sup>2</sup>	E. by N.	0 <sup>5</sup>	E.N.E.	0 <sup>5</sup>	E.	0 <sup>2</sup>	E.	0 <sup>5</sup>	E.	0 <sup>2</sup>
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>
	16	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>5</sup>	S.E. by E.	0 <sup>5</sup>
	17	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	—	S.E. by S.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>
	18	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.S.E.	0 <sup>2</sup>	S.S.E.	0 <sup>2</sup>
	19	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W.S.W.	0 <sup>5</sup>
	20	N.W. by N.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	1 <sup>0</sup>	N. by W.	1 <sup>5</sup>	N. by W.	1 <sup>5</sup>
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	N.W.	1 <sup>0</sup>	N.W.	1 <sup>0</sup>	N.W. by N.	1 <sup>0</sup>	N.W. by N.	1 <sup>5</sup>	N. by W.	2 <sup>5</sup>	N.	2 <sup>5</sup>
	23	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>	N.	0 <sup>5</sup>	N.N.W.	1 <sup>0</sup>
	24	N.N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	N. by W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>
	25	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>
	26	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	27	—	0 <sup>0</sup>	W.N.W.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	E. by N.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E.	0 <sup>5</sup>	E.	0 <sup>5</sup>
	30	—	0 <sup>0</sup>	E.N.E.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E.	0 <sup>5</sup>	E. by S.	0 <sup>5</sup>	E.	0 <sup>5</sup>

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	—	—	—	—	—	—	—	—	—	—	—	
	2	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	
	3	S. by W.	1 <sup>5</sup>	S.W.	1 <sup>0</sup>	W. by N.	1 <sup>5</sup>	W. by N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	
	4	S.W.	0 <sup>2</sup>	S.	0 <sup>2</sup>	—	0 <sup>0</sup>	S.W. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	
	5	N. by E.	0 <sup>2</sup>	—	0 <sup>0</sup>	S.E. by E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	
	6	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	N.W. by N.	0 <sup>2</sup>	N.W.	0 <sup>5</sup>
	7	—	—	—	—	—	—	—	—	—	—	—	
	8	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>
	9	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	10	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	11	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>
	12	E.	0 <sup>5</sup>	E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	13	N.E. by E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>
	16	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	17	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	18	W.N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.N.E.	0 <sup>2</sup>	W.N.W.	2 <sup>5</sup>	N.W. by N.	0 <sup>2</sup>
	19	N.W. by N.	0 <sup>5</sup>	N. by W.	1 <sup>0</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>
	20	N.N.W.	2 <sup>0</sup>	N.N.W.	1 <sup>0</sup>	N.N.W.	1 <sup>0</sup>	N.W. by N.	1 <sup>5</sup>	N.W. by N.	1 <sup>5</sup>	N.W. by N.	1 <sup>5</sup>
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E. by N.	0 <sup>2</sup>
	23	N.W. by N.	0 <sup>5</sup>	N.W.	0 <sup>2</sup>	N.W. by N.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>
	24	N.N.W.	1 <sup>0</sup>	N.N.W.	1 <sup>0</sup>	N.N.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	25	—	0 <sup>0</sup>	N.W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	26	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	27	—	0 <sup>0</sup>	E. by N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E. by N.	0 <sup>2</sup>
	30	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E. by N.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>



DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JULY.	1	—	lbs. 0'0	N.E. by E.	lbs. 0'5	E.N.E.	lbs. 0'2	E. by N.	lbs. 0'5	E.S.E.	lbs. 0'5	E.	lbs. 0'2
	2	N. by W.	1'0	N.	1'0	N.	2'5	N. by W.	1'5	N. by E.	1'0	N.E. by N.	0'5
	3	—	0'0	E. by S.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'5
	4	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2	E.S.E.	0'2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	W.N.W.	0'2	N.W.	0'2	N.N.W.	1'0	W.N.W.	1'0	S.S.W.	0'5	S. by W.	0'5
	7	—	0'0	—	0'0	N.	0'5	N. by W.	0'2	N.	0'2	N.N.W.	0'5
	8	W.	0'2	W.	0'2	N.W.	0'5	W.	0'2	S.W. by W.	0'2	S.W. by S.	0'5
	9	—	0'0	—	0'0	W.S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0
	10	—	0'0	W.S.W.	0'2	W.S.W.	0'2	S.S.W.	0'2	W. by S.	0'2	W.	0'2
	11	W.S.W.	0'2	S.W.	0'2	S.W. by W.	0'2	S.S.W.	0'2	W.S.W.	1'5	S.S.W.	1'5
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N.W.	0'5	N.W.	0'5	N.W. by W.	0'2	W. by N.	1'0	N.W.	1'5	N.W.	1'5
	14	—	0'0	N.N.W.	0'2	N. by W.	0'2	N.W.	0'5	N.W.	0'5	N.W.	0'5
	15	N.W. by W.	0'2	N.W.	0'2	N.W. by N.	0'5	N. by W.	1'5	N.N.W.	2'0	N.W. by N.	1'5
	16	—	0'0	—	0'0	N.N.W.	0'2	N.	0'2	N.N.E.	0'2	S.S.E.	0'2
	17	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S.E. by S.	0'2
	18	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S.	0'2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	0'0	—	0'0	—	0'0	E.S.E.	0'2	—	0'0	S.E. by S.	0'2
	21	E. by N.	0'2	—	0'0	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2
	22	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	S.E.	0'2
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	24	—	0'0	—	0'0	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.	1'0
	25	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	W.	0'2	N.N.W.	0'2
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	E.N.E.	0'2	N.E. by E.	0'2	E. by S.	0'5	E.	0'2	E.	0'5	E. by S.	0'2
	28	N.E.	0'2	N.E.	0'2	E. by N.	0'2	E. by N.	0'2	E.S.E.	0'5	E.S.E.	0'2
	29	—	0'0	—	0'0	—	0'0	S. by W.	0'5	S.	0'5	S.S.W.	0'5
	30	—	0'0	S.S.W.	0'2	S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W. by S.	0'5
	31	—	0'0	—	0'0	N.N.W.	0'2	N. by W.	0'5	N.N.W.	0'2	N.N.W.	0'5

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JULY.	1	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	—	
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	E.	0'2	E.	0'2	E.	0'2	—	0'0	—	0'0	—	
	5	—	—	—	—	—	—	—	—	—	—	—	
	6	N.W. by W.	1'0	N.N.W.	0'5	N.N.W.	0'2	—	0'0	N.N.W.	0'2	N.N.W.	0'2
	7	N.N.W.	1'0	N.N.W.	0'5	—	0'0	—	0'0	—	0'0	—	
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	9	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	10	N.W. by W.	5'5	N.W.	2'5	S.W.	0'5	S.W.	0'5	W.S.W.	0'5	—	
	11	S.S.W.	0'2	S.W.	0'2	W. by N.	0'5	W.	0'5	W.N.W.	0'5	W.N.W.	
	12	—	—	—	—	—	—	—	—	—	—	—	
	13	S.W.	0'2	N.W. by N.	1'0	N.W. by W.	0'2	—	0'0	N.W.	0'2	—	
	14	N.W.	1'5	N.W.	1'0	—	0'0	—	0'0	—	0'0	N.W. by W.	
	15	N.N.W.	0'5	N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	
	16	—	0'0	—	0'0	—	0'0	N.W. by N.	0'2	N.W. by N.	0'2	—	
	17	E.	0'2	E.	0'2	—	0'0	—	0'0	N.E. by N.	0'2	N.E. by N.	
	18	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	
	19	—	—	—	—	—	—	—	—	—	—	—	
	20	E.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	
	21	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	23	S.S.E.	0'2	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	
	24	N.N.W.	0'2	N.N.W.	0'2	N.W.	0'5	N.W.	0'2	N.W. by N.	0'2	N.W. by N.	
	25	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	—	0'0	—	
	26	—	—	—	—	—	—	—	—	—	—	—	
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	29	S.W. by S.	0'5	S.W. by S.	0'2	—	0'0	—	0'0	—	0'0	S. by W.	
	30	W.N.W.	1'0	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	N.W.	1'0	N.W.	
	31	N.N.W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	N. by W.	



DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
AUGUST.	1	N. by W.	0.2	N. by W.	0.2	N. by E.	0.2	N. by E.	0.5	N. by W.	0.2	N.N.W.	0.5
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	N.E. by N.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0	S.E. by S.	0.2	—	0.0
	4	—	0.0	S.S.W.	0.2	S.W.	0.2	S.W. by S.	0.5	S. by W.	0.5	N.W. by S.	0.5
	5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.2
	6	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	N.E.	0.2	S.S.E.	0.2
	7	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	8	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	N.N.W.	0.2	N. by W.	0.2	N.N.W.	0.5	N. by W.	1.0	N.	1.5	N.N.W.	0.5
	11	—	0.0	—	0.0	N.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.2
	12	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.5	S.S.W.	0.5
	13	S.W.	0.2	S.W.	0.2	—	0.0	S.W.	0.0	S.W.	0.2	S.W.	0.2
	14	—	0.0	—	0.0	—	0.0	N. by W.	0.2	N. by W.	0.2	S. by W.	0.2
	15	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	S.W. by S.	0.2	S. by W.	0.2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	0.0	N. by W.	0.2	N.	0.5	N.	0.5	N.	0.5	N.	0.5
	18	—	0.0	—	0.0	N.E.	0.2	E.N.E.	0.2	S.E.	0.2	S.E. by E.	0.2
	19	N.E.	0.2	E.S.E.	0.2	E.S.E.	0.5	E. by S.	0.5	E. by S.	1.0	E.N.E.	1.0
	20	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	21	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by E.	0.2	S.E.	0.2
	22	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0.0	—	0.0	N.E.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2
	25	N.N.E.	0.2	N.N.E.	0.2	N.E. by E.	0.2	E. by S.	0.2	E.	0.2	S.E. by E.	0.2
	26	—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	E.S.E.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by S.	0.2	S.E. by S.	0.2
	28	—	0.0	—	0.0	N.E. by N.	0.2	E.N.E.	0.2	E.	0.2	E. by S.	0.2
	29	—	0.0	—	0.0	—	0.0	E.	0.2	E. by S.	0.2	E. by S.	0.2
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	S.W.	0.2	S.W.	0.2	—	0.0	S.W.	0.2	S.W. by S.	0.5	S.W. by S.	0.5
<i>(continued)</i>													
Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
AUGUST.	1	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	—	0.0	—	0.0
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	S.S.W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	4	S.W. by S.	0.2	S.W.	0.5	S.W.	1.0	S.W.	1.0	S.W.	0.5	S.W.	0.5
	5	W. by S.	0.2	W.	0.5	W.	0.5	—	0.0	—	0.0	—	0.0
	6	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	7	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	8	—	0.0	—	0.0	—	0.0	E. by N.	0.2	E. by N.	0.2	E.N.E.	0.2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	N.N.W.	1.0	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	0.2
	11	E.S.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	12	S.S.W.	1.5	S.S.W.	0.5	S.W.	0.5	—	0.0	—	0.0	—	0.0
	13	—	0.0	N. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	14	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	15	S.S.W.	0.5	S.W. by W.	0.5	S.W. by W.	0.5	S.E.	0.5	S.E.	0.5	S.E.	0.5
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N. by W.	0.5
	18	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	19	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	20	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	21	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	22	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	25	E. by S.	0.2	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2
	26	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2	N.E.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2
	28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	29	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	S.W.	0.5	S.W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .			6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Gottingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0.2	N.N.W.	0.5	N. by W.	0.2	S.S.E.	0.2	S.	0.2	S.	0.2	S.	0.2	S.	0.2	1
0.2	—	—	S. by E.	0.2	S. by E.	0.2	S.	1.0	S.S.W.	1.0	S.S.W.	1.0	S.S.W.	0.5	2
0.2	—	—	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	3
0.5	N.W. by S.	0.5	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.5	S.W. by S.	0.5	4
0.0	—	—	S. by E.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	S.S.W.	0.2	—	0.0	5
0.2	S.S.E.	0.2	—	0.0	—	—	—	0.0	—	—	—	—	—	0.0	6
0.0	—	—	E.	0.2	E.	0.2	E.	0.2	E. by S.	0.2	—	—	—	0.0	7
0.0	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0	8
1.5	N.N.W.	0.5	N. by W.	0.5	N.W.	0.2	N. by W.	0.5	N.W. by N.	0.5	N.W. by N.	1.0	N.N.W.	1.0	9
0.2	E.	0.2	S.E. by E.	0.2	S.E. by S.	0.2	S.E.	0.2	S.E.	0.2	F.S.E.	0.2	F.S.E.	0.2	10
0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	1.0	S. by W.	1.0	S.S.W.	1.0	S.S.W.	1.5	11
0.2	S.W.	0.2	S.S.W.	0.2	S.S.E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	12
0.2	S. by W.	0.2	S.	0.2	S.	0.5	S.	0.5	S.	0.2	S.	0.2	—	0.0	13
0.2	S. by W.	0.2	S. by W.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.	0.5	S. by W.	0.5	S. by W.	0.5	14
0.5	N.	0.5	N.N.W.	0.5	N. by E.	1.0	N.E. by N.	1.0	N. by W.	1.5	N.N.W.	0.5	N.N.W.	1.0	15
0.2	S.E. by E.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S. by E.	0.2	S. by E.	0.2	16
1.0	E.N.E.	1.0	E.	1.0	E.	0.0	E. by S.	0.5	E.	0.5	E.	0.2	E.S.E.	0.2	17
0.0	—	—	S.E.	0.2	S.E.	0.2	S.E.	0.2	—	—	—	—	—	0.0	18
0.2	N.E. by N.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	19
0.2	—	—	E. by S.	0.2	E.S.E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	E. by S.	0.2	E.	0.0	20
0.2	S.E. by E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	E.	0.2	E.	0.2	21
0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	E.S.E.	0.2	—	0.0	22
0.2	S.E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	—	0.0	—	0.0	23
0.2	E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	N.N.E.	0.2	24
0.2	E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	W.	1.0	N.W.	1.0	W.N.W.	0.2	E.S.E.	0.2	25
0.5	S.W. by S.	0.5	S.S.W.	0.5	S.W. by S.	1.0	S.W. by S.	1.0	S.W. by S.	1.0	S. by W.	0.5	S.S.W.	0.5	26

AUGUST.

17 <sup>h</sup> .			18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Gottingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0.0	—	0.0	N.E.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0	N.N.E.	0.2	N.N.E.	0.2	1
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2
0.5	S.W.	0.5	S.W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	4
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6
0.2	E.N.E.	0.2	N. by E.	1.0	—	0.0	N. by E.	0.2	N. by E.	0.2	N. by E.	0.5	N. by W.	0.2	7
1.0	N.N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
0.0	—	0.0	S.W.	0.5	S.W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	9
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
0.5	S.E.	0.5	—	0.0	S. by W.	0.2	S. by W.	0.2	—	0.0	—	0.0	—	0.0	12
0.5	N. by W.	0.5	N. by W.	0.2	—	0.0	—	0.0	N. by E.	0.2	—	0.0	—	0.0	13
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	—	0.0	14
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N. by E.	0.0	15
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
0.2	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18
0.2	N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.0	N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2	N.E.	0.2	N.E.	0.2	22
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	23
0.2	—	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	24
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	29
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.W.	0.2	30
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	31

AUGUST.

DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
SEPTEMBER.	1	—	—	—	—	—	—	—	—	—	—	—
	2	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S. by S.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>	S. by W.
	4	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	5	W. by S.	0 <sup>2</sup>	W. S.W.	0 <sup>2</sup>	W. S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S. S.W.	0 <sup>5</sup>	S. S.W.
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S. S.E.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>	S. by W.
	8	—	0 <sup>0</sup>	N. N.W.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N. by E.	1 <sup>0</sup>	N.E.	0 <sup>5</sup>	N. S.E.
	9	N.E.	0 <sup>5</sup>	N.E.	0 <sup>5</sup>	E. N.E.	0 <sup>5</sup>	E. by N.	2 <sup>5</sup>	E. by N.	2 <sup>5</sup>	E. by N.
	10	E. by S.	0 <sup>5</sup>	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>5</sup>	E. by S.	1 <sup>0</sup>	E. S.E.	1 <sup>0</sup>	E. by S.
	11	S.E.	0 <sup>2</sup>	S.E. by S.	0 <sup>2</sup>	S.E. by S.	0 <sup>2</sup>	S.E. by S.	0 <sup>2</sup>	S. S.E.	0 <sup>2</sup>	S.E. by S.
	12	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	S. S.W.	0 <sup>2</sup>	S. S.W.
	13	—	—	—	—	—	—	—	—	—	—	—
	14	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W. S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>5</sup>	S.W. by S.	1 <sup>0</sup>	S.W.
	15	N.	0 <sup>5</sup>	N. N.W.	0 <sup>5</sup>	N. by E.	1 <sup>5</sup>	N. by E.	1 <sup>5</sup>	N.	1 <sup>0</sup>	N.
	16	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.E. by E.	0 <sup>2</sup>	—	0 <sup>2</sup>	—
	17	N. N.W.	0 <sup>2</sup>	N. N.W.	0 <sup>2</sup>	N. N.W.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by S.
	18	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E. S.E.
	19	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W. by N.	0 <sup>2</sup>	S. S.W.	0 <sup>2</sup>	S. by W.
	20	—	—	—	—	—	—	—	—	—	—	—
	21	N.	2 <sup>0</sup>	N.	2 <sup>0</sup>	N. by W.	2 <sup>0</sup>	N.E. by N.	2 <sup>5</sup>	N.	1 <sup>0</sup>	N. by E.
	22	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S. by E.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>	S. by E.
	23	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S. S.W.	0 <sup>2</sup>	S. S.W.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>	S. by E.
	24	N.W. by N.	0 <sup>2</sup>	N.W. by N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	W. S.W.	0 <sup>2</sup>	W. by S.	0 <sup>2</sup>	W. by S.
	25	N.E.	0 <sup>2</sup>	N. N.E.	0 <sup>2</sup>	N. N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	E. N.E.	0 <sup>2</sup>	E.
	26	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by W.	0 <sup>2</sup>	W.
	27	—	—	—	—	—	—	—	—	—	—	—
	28	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.
	29	S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S. S.W.	0 <sup>2</sup>	S.W. by S.
	30	S.W. by S.	0 <sup>5</sup>	S.W. by S.	0 <sup>5</sup>	S.W. by S.	0 <sup>2</sup>	S. S.W.	0 <sup>5</sup>	S.W.	1 <sup>0</sup>	S. S.W.

(continued)

Mean Göttingen Time.	12.		13.		14.		15.		16.		17.	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
SEPTEMBER.	1	S.W.	0 <sup>2</sup>	S.W. by W.	0 <sup>2</sup>	S.W. by W.	0 <sup>2</sup>	W. S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	W. N.W.
	2	S. by E.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>	S. by E.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	4	S. S.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.
	5	N.	0 <sup>2</sup>	N. N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	6	—	—	—	—	—	—	—	—	—	—	—
	7	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	N.W.	0 <sup>5</sup>	N.W. by N.	0 <sup>5</sup>	N. N.W.	0 <sup>5</sup>	N. N.W.
	8	N.	0 <sup>5</sup>	N.	0 <sup>2</sup>	N. N.E.	0 <sup>2</sup>	N. N.E.	0 <sup>2</sup>	E. N.E.	0 <sup>5</sup>	N.E. by N.
	9	E.	1 <sup>5</sup>	E.	1 <sup>0</sup>	E.	1 <sup>0</sup>	E.	1 <sup>0</sup>	E.	1 <sup>0</sup>	E.
	10	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	11	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	12	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	W.	0 <sup>5</sup>	W.	0 <sup>2</sup>	W. N.W.	0 <sup>2</sup>	N.W. by W.	0 <sup>2</sup>	S.W. by W.	0 <sup>5</sup>	N.W.
	15	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N. N.W.
	16	S. S.W.	0 <sup>5</sup>	S. by W.	0 <sup>5</sup>	S. S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—
	17	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	18	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	19	S.W.	0 <sup>5</sup>	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	22	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	23	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	24	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. N.E.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	N.E. by N.
	25	N. N.W.	1 <sup>0</sup>	N. N.W.	1 <sup>0</sup>	N.W. by N.	1 <sup>0</sup>	N.W.	1 <sup>0</sup>	N.W.	0 <sup>5</sup>	N.W.
	26	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—
	27	—	—	—	—	—	—	—	—	—	—	—
	28	S. S.W.	0 <sup>5</sup>	S. S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by W.
	29	S. by W.	0 <sup>5</sup>	S. S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	S.W. by S.	0 <sup>2</sup>	S. S.W.	0 <sup>2</sup>	S. S.W.
	30	S.W.	1 <sup>0</sup>	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	W.	0 <sup>2</sup>	W. N.W.	0 <sup>2</sup>	W. N.W.



DIRECTION AND FORCE OF THE WIND.

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Gottingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
W. by N.	1'0	S.W. by S.	0'5	S.W.	1'0	S.W.	1'0	S.W.	1'0	S.W.	0'2	1
S.E. by S.	0'2	S.E.	0'2	S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	2
S.W. by S.	0'2	S.W.	0'5	S.W. by S.	0'5	S.W. by S.	0'5	S.W. by S.	0'5	—	0'0	3
S.S.W.	0'2	S.W. by S.	0'2	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'5	4
S.W.	0'5	S.W.	0'5	S.W.	0'5	—	0'0	—	0'0	—	0'0	5
S. by W.	0'2	S.S.W.	1'0	S.W. by S.	1'0	S.W. by S.	1'0	S.W.	1'0	S.W.	0'5	6
N.N.E.	0'2	N.E.	0'2	E.	0'2	N. by E.	0'2	N.E. by N.	0'5	N. by E.	0'5	7
E. by N.	2'5	E. by N.	1'0	E. by N.	1'0	E. by N.	1'5	E.	2'0	E.N.E.	1'5	8
E.	1'0	E.	1'0	E.	1'0	E.	1'0	E.	1'0	E.	0'2	9
S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	10
—	0'0	E. by N.	0'5	S.	0'2	S.	0'2	—	0'0	—	0'0	11
—	—	—	—	—	—	—	—	—	—	—	—	12
S.W. by S.	0'5	S.W. by S.	0'5	S.S.W.	1'0	S.W. by S.	1'0	—	0'0	S.W.	0'5	13
N.N.W.	1'0	N.N.W.	1'0	N.W.	1'5	N.N.W.	1'0	N.W. by N.	1'0	N.	0'2	14
S.	0'2	S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	15
E.	0'2	E.S.E.	0'2	E.N.E.	0'2	—	0'0	—	0'0	—	0'0	16
S.E. by S.	0'2	S.E.	0'5	E.S.E.	0'5	S.E.	0'2	—	0'0	—	0'0	17
E.S.E.	0'2	S. by W.	0'5	S. by W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W.	0'5	18
S. by W.	0'2	—	—	—	—	—	—	—	—	—	—	19
N.	0'2	N.N.W.	0'2	N. by E.	0'2	N.	0'2	N. by W.	0'2	—	0'0	20
S. by E.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	21
S.	0'2	S.	0'2	S.	0'5	S. by W.	1'0	—	0'0	—	0'0	22
W. by S.	0'2	N. by W.	0'5	N. by W.	1'0	N.E. by N.	0'2	N.N.E.	0'5	N. by E.	0'2	23
E.	2'5	E.	2'5	E.N.E.	1'0	E.N.E.	0'5	N.E. by N.	0'5	N.	0'5	24
S. by W.	0'2	S. by W.	0'5	S.	0'2	S.	0'2	S.W.	0'2	S.W. by W.	0'2	25
—	—	—	—	—	—	—	—	—	—	—	—	26
S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.S.W.	0'2	S.S.W.	0'2	27
S.W. by S.	1'0	S.W.	0'5	S.W. by S.	1'0	S.W. by S.	0'5	S.W. by S.	0'2	S.S.W.	0'2	28
S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	1'5	S.W. by S.	2'0	S.W.	2'0	29
—	—	—	—	—	—	—	—	—	—	—	—	30

SEPTEMBER.

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Gottingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
S.W. by S.	0'2	—	0'0	—	0'0	—	0'0	S.W.	0'2	—	0'0	2
—	0'0	S.S.E.	0'2	—	0'0	S.W. by S.	0'2	—	0'0	—	0'0	3
—	0'0	—	0'0	W. by S.	0'2	—	0'0	—	0'0	W. by S.	0'2	4
—	—	—	—	—	—	—	—	—	—	—	—	5
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
N.N.W.	1'0	N.N.W.	1'0	N.N.W.	1'0	N. by W.	0'5	N. by W.	0'5	N.N.E.	0'5	7
N.E. by N.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	8
E. by N.	1'0	N.E.	0'5	E.	0'5	E.	0'5	E.	0'5	E.	0'5	9
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.E.	0'2	10
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
—	—	—	—	—	—	—	—	—	—	—	—	12
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
N.W.	0'5	N.N.W.	2'5	N.N.W.	2'5	N.N.W.	2'5	N.W.	2'0	N.	0'5	14
N.N.W.	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	16
—	0'0	N. by E.	0'2	N. by E.	0'2	N. by E.	0'2	N.	0'2	N. by E.	0'2	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
—	—	—	—	—	—	—	—	—	—	—	—	19
W. by N.	1'0	W. by N.	1'0	N.W.	1'5	N.N.W.	3'0	N.N.W.	3'0	N. by W.	3'5	20
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
N.E. by N.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by N.	0'5	N.E. by N.	0'5	N.E.	0'2	24
N.W.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'2	W.N.W.	0'2	—	0'0	25
—	—	—	—	—	—	—	—	—	—	—	—	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W.	0'2	28
S.S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'5	S.	1'0	29
N.W.	1'0	N.W.	0'5	—	0'0	—	0'0	—	0'0	N.N.W.	0'5	30

SEPTEMBER.



DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .			6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	E. by N.	0.2	E. by N.	0.2	N.E.	0.2	E.N.E.	0.5	1
0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N.W. by N.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	2
0.2	S.E. by S.	0.2	S. by E.	0.2	S.E. by S.	0.2	S.E.	0.2	E.S.E.	0.2	S.E. by E.	0.2	—	0.0	3
0.2	—	0.2	—	0.2	—	0.2	—	0.2	—	0.2	—	0.0	—	0.0	4
0.2	S. by E.	0.2	S.	0.5	S.	0.5	S.	0.5	S.W.	0.2	—	0.0	—	0.0	5
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	S.E.	0.5	S.E. by S.	0.2	S.S.E.	0.2	6
0.5	S. by E.	0.5	S.	0.5	S.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.W. by S.	0.5	7
0.0	S.E. by E.	0.2	E.N.E.	0.5	E.N.E.	0.5	N.E. by E.	0.5	N.E. by E.	0.2	E.N.E.	0.2	E.	0.2	8
0.2	W.N.W.	0.2	W. by N.	0.2	W. by N.	0.2	N.N.W.	2.5	N.N.W.	3.0	N.N.W.	3.0	N.N.W.	2.0	9
0.2	E.	0.2	S.W.	0.2	S.	0.2	S.E.	0.2	S.E.	0.2	S.E. by E.	0.2	—	0.0	10
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11
1.0	S. by W.	0.5	S.	0.5	S.	0.5	S.	0.5	S.	0.5	S. by W.	0.5	S. by W.	0.5	12
0.2	N. by E.	0.2	N.	0.5	N.	1.0	N.	2.5	N. by W.	3.5	N. by W.	4.5	N. by W.	5.0	13
0.2	S. by W.	0.2	S. by E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	14
0.2	N.W. by W.	0.2	W. by N.	0.5	N.W. by W.	0.2	N.W. by N.	0.2	W. by S.	0.2	W.S.W.	0.2	—	0.0	15
0.2	—	0.0	—	0.0	—	0.5	S. by E.	0.5	S.	0.2	—	0.0	W.S.W.	0.2	16
0.0	—	0.0	—	0.0	—	0.0	N.W. by N.	0.2	N.W. by N.	0.2	N.W.	0.2	N.W.	0.2	17
0.5	S.S.W.	0.5	S.W.	1.0	W.S.W.	1.0	W.S.W.	1.0	S.W.	0.5	S.W.	0.2	S.W.	0.2	18
0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.S.W.	0.5	W. by S.	2.0	W. by S.	1.5	W.S.W.	1.0	W. by N.	0.5	19
0.2	S.W.	0.5	W.S.W.	1.5	W. by S.	1.0	W.N.W.	1.0	W.N.W.	0.5	W. by S.	0.5	—	0.0	20
1.0	N. by W.	2.5	N. by W.	2.5	N.	2.5	N.	2.5	N.	2.5	N.W. by W.	2.0	N.W. by W.	1.5	22
0.2	S. by E.	0.2	—	0.0	—	0.2	W.S.W.	0.5	—	0.0	S.W. by W.	0.5	W.S.W.	0.5	23
0.5	W.N.W.	1.5	W.	2.5	W. by N.	2.5	N.N.W.	2.5	N.W.	2.0	N.W. by N.	1.5	W.N.W.	1.0	24
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25
0.0	—	0.0	E. by S.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E.S.E.	0.2	26
0.2	N.W. by W.	0.2	W. by S.	0.2	W.N.W.	0.2	N.W. by W.	0.2	N.W. by N.	0.5	N.N.W.	1.0	N.N.W.	1.0	27
1.5	N.W.	0.2	N.W. by W.	0.2	N.N.W.	0.2	N.W.	0.2	W. by N.	0.2	N.N.W.	0.2	—	0.0	28
0.2	W.	0.5	W.N.W.	0.2	W.	0.5	W.	0.5	N.W. by N.	0.5	—	0.0	—	0.0	29
0.2	N. by W.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.5	N. by E.	0.2	N.E.	0.2	N.N.E.	0.2	30
2.0	N.E. by N.	2.0	N.E.	2.0	N.E. by N.	2.5	N.E.	3.0	N.E.	2.0	N.E.	3.5	E. by N.	5.0	31
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1 Nov.

OCTOBER.

17 <sup>h</sup> .			18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
1.5	N.E. by N.	1.5	N.E. by N.	0.5	N. by E.	0.5	N. by E.	0.2	N.N.E.	0.2	N. by E.	0.2	N.N.E.	0.2	1
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	4
0.0	—	0.0	—	0.0	—	0.0	N.W. by W.	0.2	N.W. by W.	0.2	N.W.	0.2	N.W.	0.2	5
0.2	N.W. by N.	0.5	S.S.W.	0.5	S.E.	0.2	S.	0.2	S.S.W.	0.2	N.W.	0.2	—	0.0	7
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9
0.2	E. by S.	0.2	S.E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	—	0.0	—	0.0	—	0.0	10
0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
1.5	W. by N.	1.5	W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12
0.0	W. by S.	0.2	—	0.0	W. by N.	0.5	W. by N.	0.5	W.	0.2	—	0.0	—	0.0	13
0.0	—	0.0	—	0.0	N.E. by N.	0.2	S.E. by S.	0.5	S.E. by S.	0.2	S.E. by S.	1.0	S.E. by S.	0.5	14
1.5	W.N.W.	1.0	W. by S.	0.2	N.W.	0.5	N.W. by W.	2.0	N.W. by W.	1.0	N.W.	1.5	N.W.	1.5	16
0.2	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	S.S.W.	0.2	W.S.W.	0.5	—	0.0	18
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	S.W.	1.0	S.S.W.	1.0	21
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	23
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	24
0.2	S.S.W.	0.2	S.S.W.	0.2	S.	0.5	S. by W.	1.0	S. by W.	0.5	S.S.W.	0.5	S.S.W.	0.2	25
0.5	N. by W.	0.2	N.N.E.	0.2	N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	26
0.0	—	0.0	—	0.0	W. by S.	0.2	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	27
0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	28
0.5	N.E.	0.5	N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	E.N.E.	0.5	N.N.E.	1.5	29
3.5	—	4.0	—	—	—	—	—	—	—	—	—	—	—	—	30
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31
—	—	—	N.E.	3.0	N.	2.5	N.E.	2.5	N.E.	3.8	N.E.	3.5	N.E.	3.5	1 Nov.

OCTOBER.

Portion of 1st November.

DIRECTION AND FORCE OF THE WIND.													
Mean Gottingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
NOVEMBER.	2	N. E.	3'0	N. E.	2'5	N. E.	2'5	E. N. E.	1'0	E. N. E.	0'5	E. N. E.	0'5
	3	S. W. by S.	0'2	N. W. by S.	0'2	N. W. by S.	0'2	S. W. by S.	0'2	S. W. by W.	0'2	S. S. W.	0'2
	4	—	0'0	—	0'0	N. W. by W.	0'2	N. W.	0'5	N. N. W.	1'0	N. N. W.	0'5
	5	N.	0'2	—	0'0	N.	0'2	N. by E.	0'2	N. by E.	0'2	E. S. E.	0'2
	6	N.	0'2	N.	0'2	N.	0'2	N.	0'0	N. E.	0'2	N. E. by E.	0'2
	7	—	0'0	—	0'0	N. E. by N.	0'2	N. E. by N.	0'2	N. E. by N.	0'2	E. N. E.	0'2
	8	—	—	—	—	—	—	—	—	—	—	—	—
	9	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S. S. E.	0'2
	10	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	11	E. N. E.	0'2	—	0'0	E. N. E.	0'2	N. N. E.	0'2	N. by E.	0'2	N. by E.	0'2
	12	N. by E.	0'5	N. N. E.	0'5	N. by E.	0'5	N. by E.	0'5	N.	0'5	N. by E.	0'5
	13	—	0'0	—	0'0	—	0'0	E. N. E.	0'2	E. N. E.	0'2	E. by N.	0'5
	14	E. by N.	0'2	E. by S.	0'5	E.	0'2	E. by S.	0'2	E. by N.	0'5	E. N. E.	0'2
	15	—	—	—	—	—	—	—	—	—	—	—	—
	16	—	0'0	N.	0'2	N. by E.	0'2	—	0'0	—	0'0	E. N. E.	0'2
	17	—	0'0	E. by S.	0'2	E. S. E.	0'2	E. by S.	0'5	E. S. E.	1'0	E. S. E.	0'5
	18	—	0'0	—	0'0	—	0'0	—	0'0	S. W. by W.	0'5	W. by S.	1'5
	19	—	0'0	—	0'0	N. by E.	0'2	N. by E.	0'2	N. N. W.	0'2	N.	0'2
	20	W. N. W.	2'0	N. W. by W.	2'5	N. W. by W.	2'5	N. W.	2'0	N. N. W.	2'5	W. by N.	1'0
	21	S. W.	0'2	S. W.	0'2	S. W.	0'2	S. W.	0'2	S. W.	1'0	W. S. W.	1'0
	22	—	—	—	—	—	—	—	—	—	—	—	—
	23	W. by N.	0'2	W. by N.	0'2	W. by N.	0'2	W. N. W.	0'2	W. by N.	0'2	W. S. W.	0'5
	24	—	0'0	—	0'0	W.	0'2	W.	0'0	W.	0'2	W.	0'2
	25	N. N. E.	0'5	N. N. E.	0'5	N. N. E.	0'5	N. N. E.	1'5	N.	2'5	N.	2'5
	26	W. N. W.	1'0	W. N. W.	1'5	W. by N.	1'5	W.	3'0	W. N. W.	3'0	W.	1'0
	27	W. S. W.	2'0	S. W.	1'0	S. W.	0'5	S. W.	0'5	W. S. W.	0'2	S. W.	0'2
	28	—	0'0	—	0'0	S. W.	0'5	S. W. by W.	0'2	S. W. by W.	0'2	S. W. by W.	0'5
	29	—	—	—	—	—	—	—	—	—	—	—	—
	30	N. by E.	0'5	N. by E.	0'2	—	0'0	—	0'0	—	0'0	N. by E.	0'5

(continued)

Mean Gottingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
NOVEMBER.	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	3	—	0'0	—	0'0	—	0'0	S. S. W.	0'2	W. by N.	0'2	—
	4	N. W. by N.	0'2	N. W. by N.	0'2	N. W. by N.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.
	5	E.	0'2	N. E.	0'2	N. N. E.	0'2	N. by E.	0'2	N. by E.	0'2	N. by E.
	6	N. E.	0'2	N. E.	0'2	N. E.	0'2	—	0'0	—	0'0	N. N. E.
	7	E.	0'2	E.	0'5	E. by N.	0'2	E. N. E.	0'5	E. N. E.	0'5	E. N. E.
	8	—	—	—	—	—	—	—	—	—	—	—
	9	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	10	E. N. E.	0'2	E. N. E.	0'5	E. N. E.	1'0	E. N. E.	1'5	E. N. E.	2'0	E. N. E.
	11	N. by W.	0'2	N. by E.	0'2	N. N. E.	0'2	N. by W.	0'2	N. E. by N.	0'2	N.
	12	N. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	13	—	0'0	—	0'0	E.	0'5	E. by S.	0'5	E. by N.	0'5	E.
	14	E. N. E.	0'5	E. N. E.	0'5	E. N. E.	0'5	E. N. E.	1'0	E. N. E.	1'0	E. N. E.
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	0'0	—	0'0	—	0'0	—	0'0	E. by S.	0'2	E. by S.
	17	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E.	0'2	E.
	18	W. N. W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	19	N. by W.	3'0	N. N. W.	3'5	N. N. W.	3'0	N. W.	3'0	N. W.	3'5	N. W.
	20	W. by S.	0'5	W. S. W.	0'2	W. S. W.	0'2	—	0'0	—	0'0	—
	21	S. S. W.	0'5	S. S. W.	0'2	S. S. W.	0'5	S. S. W.	0'5	S. W.	0'5	W. by N.
	22	—	—	—	—	—	—	—	—	—	—	—
	23	S. W. by S.	0'2	S. W. by S.	0'2	W. S. W.	0'2	—	0'0	—	0'0	S. W.
	24	N. by W.	0'2	N. N. W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—
	25	N. by W.	3'0	N. by W.	3'0	N. N. W.	3'5	N. N. W.	2'0	N. N. W.	2'0	N. W. by W.
	26	W. S. W.	4'0	W. S. W.	4'0	W. S. W.	3'0	W. S. W.	4'0	W. S. W.	3'5	W. S. W.
	27	S. S. W.	2'0	S. S. W.	3'0	S. S. W.	2'5	S. W.	2'0	S. W.	1'5	S. W.
	28	S. W. by W.	0'2	S. W. by W.	0'2	—	0'0	—	0'0	—	0'0	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	N.	2'0	N.	0'5	N.	0'2	N. by E.	0'2	—	0'0	—

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .			6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs. 0.5	E.N.E.	0.5	N.E. by E.	0.5	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	2
0.2	S.S.W.	0.2	S.S.W.	0.2	W. by N.	0.2	W.	0.2	W.N.W.	0.2	S.S.W.	0.2	—	0.0	3
1.0	N.N.W.	0.5	N.N.W.	0.5	N.W. by N.	0.2	N.W.	0.5	N.W.	0.5	N.W.	0.5	N.W. by N.	0.2	4
0.2	E.S.E.	0.2	E.S.E.	0.2	S. by E.	0.2	E.S.E.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2	5
0.2	N.E. by E.	0.2	E.	0.2	E.	0.2	N.E. by E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	6
0.2	E.N.E.	0.2	E. by N.	0.5	E.	0.5	N.E.	0.2	E.N.E.	0.2	E. by N.	0.2	E.	0.2	7
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
0.0	S.S.E.	0.2	S. by E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9
0.0	—	0.0	E.S.E.	0.2	E. by N.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.5	E.N.E.	0.5	16
0.2	N. by E.	0.2	N. by E.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.2	11
0.5	N. by E.	0.5	N. by E.	0.5	N.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	12
0.2	E. by N.	0.5	E. by N.	0.5	E.N.E.	0.5	E.N.E.	0.5	E. by N.	0.2	E.	0.2	E.	0.2	13
0.5	E.N.E.	0.2	E.N.E.	0.2	E.	1.5	E.	1.5	E.	1.5	E. by N.	1.5	E. by N.	0.5	14
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15
0.0	E.N.E.	0.2	E. by N.	0.2	—	0.0	—	0.0	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	16
1.0	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.2	E.S.E.	0.2	E.	0.5	E. by N.	0.5	E. by N.	0.5	17
0.5	W. by S.	1.5	W.S.W.	2.0	W. by S.	0.5	W. by S.	1.0	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.2	18
0.2	N.	0.2	N. by W.	0.2	N.	0.2	N. by W.	1.0	N. by W.	0.5	N.N.W.	1.5	N. by W.	2.5	19
2.5	W. by N.	1.0	N.W. by W.	3.0	W.N.W.	2.5	W. by N.	2.0	W. by N.	1.5	W.N.W.	1.5	W. by S.	0.5	20
1.0	W.S.W.	1.0	S.W.	0.5	S.W.	0.5	S.S.W.	1.0	S. by W.	1.0	S.S.W.	2.0	S.S.W.	2.0	21
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22
0.2	W.S.W.	0.5	W.N.W.	0.5	N.W. by W.	0.5	W. by S.	0.2	W. by S.	0.2	S.W.	0.2	S.W. by S.	0.2	23
0.2	W.	0.2	W.	0.2	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N. by W.	0.2	24
2.5	N.	2.5	N.	3.5	N.N.W.	3.0	N.N.W.	3.5	N.N.W.	4.0	N.W.	3.5	N.N.W.	3.0	25
3.0	W.	1.0	W.	6.0	W.	10.0	W.	10.0	W.S.W.	8.0	W.S.W.	5.0	W.S.W.	4.5	26
0.2	S.W.	0.2	S.W.	0.2	—	0.0	S.E. by S.	0.2	S.E. by S.	0.5	S.E. by S.	0.5	S.E. by S.	1.5	27
0.2	S.W. by W.	0.5	W. by S.	0.5	W.S.W.	0.5	W.S.W.	2.0	W.S.W.	1.5	S.W.	0.2	S.W. by W.	0.2	28
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	29
0.0	N. by E.	0.5	N. by E.	0.2	N. by W.	1.5	N.N.W.	1.5	N.W. by W.	1.5	N.W.	1.0	N. by W.	1.0	30

NOVEMBER.

17 <sup>h</sup> .			18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs. 0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by S.	0.2	2
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	4
0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	5
0.0	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6
0.5	E.N.E.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	7
—	—	—	E.N.E.	1.0	E.N.E.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	8
0.0	—	0.0	—	0.0	—	0.0	N.W.	0.2	—	0.0	—	0.0	W.S.W.	0.2	9
2.0	E.N.E.	2.0	E.S.E.	2.5	N.E. by N.	1.0	E.N.E.	0.5	E.S.E.	0.5	E.N.E.	0.2	E.N.E.	0.5	10
0.2	N.	0.2	N.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N.	0.5	N.	0.5	11
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12
0.5	E.	0.5	E. by S.	0.2	E. by S.	0.5	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by N.	0.2	13
1.0	E.N.E.	1.0	—	—	—	—	—	—	—	—	—	—	—	—	14
0.2	E. by S.	0.2	N.W. by W.	0.5	N.W. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	15
0.2	E.	0.2	E.S.E.	0.2	S.E. by E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	16
0.0	—	0.0	E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18
3.5	N.W.	3.5	N.W.	3.5	N.W. by W.	3.5	N.W.	3.5	N.W.	3.5	N.W.	2.5	W.N.W.	1.5	19
0.0	—	0.0	—	0.0	W.S.W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W.	0.2	20
0.5	W. by N.	1.5	—	—	—	—	—	—	—	—	—	—	—	—	21
0.0	—	0.0	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W. by N.	0.2	22
0.0	S.W.	0.2	S.W.	0.5	S.S.W.	0.5	S.W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	23
0.0	—	0.0	N. by W.	0.2	N. by E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	N.N.E.	0.5	24
2.0	N.W. by W.	0.5	N.N.W.	1.5	W. by N.	1.5	W. by N.	1.0	W. by N.	1.0	W. by N.	1.0	W.N.W.	1.5	25
3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.5	W.S.W.	3.0	W.S.W.	2.0	26
1.5	S.W.	0.5	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	28
0.0	—	0.0	N.W.	1.5	N.W.	1.5	N.W.	1.0	N.W.	0.2	N.W.	0.2	N.	0.5	29
—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30

NOVEMBER.

Mean Göttingen Time.		DIRECTION AND FORCE OF THE WIND.											
		0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
DECEMBER.	1	—	lbs. 0'0	—	lbs. 0'0	—	lbs. 0'0	N.E. by N.	lbs. 0'2	N.E. by N.	lbs. 0'2	N.E.	lbs. 0'2
	2	E. by N.	1'5	E.N.E.	2'0	E.N.E.	2'0	E.	2'0	E.	2'0	E.	1'0
	3	W.S.W.	3'0	W.S.W.	2'5	W.S.W.	3'0	W.S.W.	3'0	S.W.	3'0	S.W.	3'0
	4	S.W. by W.	2'0	W.S.W.	2'5	W.S.W.	3'0	W. by S.	2'5	W. by S.	3'0	W. by S.	3'0
	5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	E. by S.	0'5	E. by S.	0'5	E. by S.	0'5	E.S.E.	0'5	E.S.E.	0'2	E.S.E.	0'2
	8	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'2
	9	N.N.W.	0'2	N.	0'2	N.N.W.	0'2	N.N.W.	0'2	N. by W.	0'2	N.N.E.	0'2
	10	W.S.W.	2'5	W.S.W.	3'0	W.S.W.	3'0	W. by S.	2'0	W. by S.	1'5	S.W. by W.	1'0
	11	N. by W.	0'2	N.N.W.	0'2	N. by W.	0'2	—	0'0	—	0'0	N.N.W.	1'5
	12	—	0'0	—	0'0	—	0'0	N. by W.	0'5	N.	0'2	N.N.W.	0'5
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	1'0	N.N.W.	1'0	N.N.W.	2'0	N.N.W.	1'5
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'2
	16	—	0'0	—	0'0	N. by E.	0'2	N.E. by N.	0'2	N.E.	0'2	E.N.E.	0'2
	17	N.E. by N.	1'0	N.E. by N.	1'0	N.E. by N.	1'0	N.E. by N.	0'5	N.E.	0'5	N.E.	1'0
	18	—	0'0	—	0'0	—	0'0	N. by E.	0'2	—	0'0	N. by E.	0'2
	19	W.N.W.	0'2	W.N.W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	N.W. by N.	2'0	N.W.	1'5
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	N.N.W.	0'5	N.N.W.	1'0	N.N.W.	0'2	N.N.W.	1'5	N.N.W.	2'0	N.W.	1'5
	22	N.E.	0'5	N.E.	0'5	N.N.E.	0'5	N. by W.	0'5	N.N.E.	0'5	N.	0'5
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	24	S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	0'0	—	0'0	W.N.W.	0'2	—	0'0	—	0'0	—	0'0
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	—	0'0	N.N.W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'5
	29	—	0'0	—	0'0	—	0'0	N.E.	0'2	E. by N.	0'5	E.	0'5
	30	E. by S.	0'5	E. by S.	0'2	—	0'0	S.	0'2	S.W.	0'2	S.W.	0'2
	31	—	0'0	—	0'0	—	0'0	S.E.	0'2	—	0'0	—	0'0

(continued)

Mean Göttingen Time.		DIRECTION AND FORCE OF THE WIND.											
		12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
DECEMBER.	1	E.	0'5	E.	2'5	E. by N.	2'5	E. by N.	2'5	E. by N.	3'5	E. by N.	3'0
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W.	0'5
	3	W. by S.	2'5	W. by S.	2'5	W. by S.	2'5	W. by S.	3'5	W.	2'0	S.W. by W.	2'5
	4	N.W.	0'5	W. by N.	0'2	W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2
	5	N.N.E.	0'2	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.N.E.	0'5
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	S.E.	0'2	E. by S.	0'2	E. by S.	0'2	—	0'0	—	0'0	E. by S.	0'2
	8	—	0'0	N. by E.	0'2	N. by E.	0'2	—	0'0	—	0'0	—	0'0
	9	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.E.	0'2	N.E.	0'2
	10	N.	0'2	N. by W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.W. by N.	0'2
	11	N.W. by N.	0'2	N.W. by N.	0'2	N.W. by N.	0'2	N.W.	0'5	N.W.	0'2	N.W.	0'2
	12	N.W.	0'2	N. by W.	0'5	N.N.W.	1'0	N.	0'5	N.	0'5	N.	0'2
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	N.W. by W.	0'5	N.W. by W.	0'5	N.W. by W.	0'5	—	0'0	—	0'0	—	0'0
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	16	N.E.	1'0	N.E. by E.	1'5	E. by N.	2'0	E. by N.	1'5	N.E.	1'0	N.E.	0'5
	17	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19	N.W. by W.	1'5	W.N.W.	1'0	W.N.W.	1'5	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	1'0
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	24	—	0'0	W.S.W.	0'2	W.S.W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W.	0'2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	S.S.W.	2'0	S.S.W.	1'5	S.S.W.	1'0	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	0'2
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	N.N.W.	0'2	N.W.	3'0	N.W. by W.	2'0	N.W. by W.	1'0	N.W. by W.	0'2	N.W.	0'2
	29	E.	1'5	E.	1'5	E.	2'0	E.	3'0	E.	2'5	E.	2'5
	30	S.W.	0'2	S.W.	0'2	S.W.	0'2	—	0'0	—	0'0	—	0'0
	31	—	0'0	—	0'0	—	0'0	N.E.	0'2	—	0'0	N.E. by N.	0'2

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .			6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0.2	N.E.	0.2	N.E.	0.2	E. by S.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.2	1
2.0	E.	1.0	E.	0.5	—	0.0	E. by N.	0.2	E.N.E.	0.2	—	0.0	—	0.0	2
3.0	S.W.	3.0	S.W.	3.0	S.W. by W.	3.0	W. by S.	3.5	W.S.W.	2.5	W. by S.	2.0	W. by S.	2.5	3
3.0	W. by S.	3.0	W.	2.5	W. by N.	2.0	W.	0.5	W. by S.	0.2	N.W. by W.	0.2	N.W.	1.0	4
0.0	—	0.0	W. by N.	0.2	W.	0.2	W. by S.	0.2	—	0.0	—	0.0	—	0.0	5
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.	0.2	E.	0.2	E.S.E.	0.2	S.S.E.	0.2	6
0.2	N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	7
0.2	N.N.E.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	8
1.5	S.W. by W.	1.0	S.W. by W.	0.5	W.S.W.	0.2	W.S.W.	0.2	—	0.0	—	0.0	N. by E.	0.2	9
0.0	N.N.W.	1.5	N.W.	1.5	N.W.	1.5	N.W. by W.	1.0	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by N.	0.2	10
0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	1.0	N.W.	1.0	N.W.	0.5	11
2.0	N.N.W.	1.5	N.N.W.	1.0	N.N.W.	1.5	N.W.	1.5	N.W.	1.5	W.N.W.	1.0	N.W. by W.	0.5	12
0.2	W.	0.2	W.N.W.	0.2	—	0.0	W.S.W.	0.2	N.W. by N.	0.2	—	0.0	—	0.0	13
0.2	E.N.E.	0.2	E.	0.2	E.	0.5	E. by N.	0.5	E. by N.	0.5	E.N.E.	1.0	N.E.	1.0	14
0.5	N.E.	1.0	N.E. by E.	0.5	N.E. by E.	0.5	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	15
0.0	N. by E.	0.2	N. by E.	0.2	N.	0.2	W. by N.	0.2	W. by N.	0.2	—	0.0	—	0.0	16
2.0	N.W.	1.5	N.W. by N.	2.0	N.W. by N.	2.0	N.W.	2.5	N.W.	2.5	N.W.	2.0	N.W. by W.	1.0	17
2.0	N.W.	1.5	N.W.	0.2	N.W.	0.2	N.W. by W.	0.2	N.W.	0.2	N.W.	0.2	—	0.0	18
0.5	N.	0.5	N. by W.	0.5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
0.2	S. by E.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	S.W. by W.	0.2	—	0.0	21
0.0	—	0.0	S.W. by S.	0.5	S.W. by S.	0.5	S.S.W.	0.5	S.S.W.	1.5	S.S.W.	1.5	S.S.W.	2.5	22
0.2	N. by W.	0.5	N.W. by N.	1.5	N.N.W.	1.0	N.W. by N.	1.0	N.N.W.	1.5	N.N.W.	0.5	N.N.W.	0.2	23
0.5	E.	0.5	E. by S.	1.5	E.S.E.	0.5	E. by S.	0.5	E.	0.5	E. by S.	2.0	E. by N.	1.5	24
0.2	S.W.	0.2	S.W. by W.	0.2	W.S.W.	1.0	W.S.W.	1.0	S.W.	0.5	S.W.	0.2	S.W.	0.2	25
0.0	—	0.0	—	0.0	—	0.0	N.E. by E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	—	0.0	26

DECEMBER.

17 <sup>h</sup> .			18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
3.5	E. by N.	3.0	E. by N.	3.5	E. by N.	3.0	E. by N.	4.0	E. by N.	4.5	E. by N.	4.0	E.	2.5	1
0.0	S.W.	0.5	W. by S.	0.5	W. by S.	1.0	S.W. by W.	2.0	S.W.	1.0	W.S.W.	2.5	W.S.W.	2.0	2
2.0	S.W. by W.	2.5	W.S.W.	1.5	W.S.W.	2.0	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	2.0	3
0.2	W.S.W.	0.2	W.S.W.	0.2	W. by S.	0.2	W. by S.	0.2	W. by S.	0.2	—	0.0	—	0.0	4
0.2	N.N.E.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	5
0.0	—	—	E.S.E.	1.5	E. by S.	1.0	E. by S.	0.5	E. by S.	1.0	E. by S.	1.0	E. by S.	1.0	6
0.0	E. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	7
0.0	—	0.0	—	0.0	N. by E.	0.2	N. by W.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	8
0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E. by E.	0.2	E.N.E.	0.2	E.	1.0	9
0.2	N.W. by N.	0.2	N.W. by N.	0.2	N.N.W.	0.5	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	10
0.2	N.W.	0.2	N.W.	0.2	N. by E.	0.2	N. by W.	0.2	N. by W.	0.2	—	—	—	0.0	11
0.5	N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	—	12
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N.N.W.	0.2	13
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	14
1.0	N.E.	0.5	N.E.	0.5	N.E.	1.5	N.E.	1.5	N.E.	1.5	N.E.	1.5	N.E. by N.	1.0	15
0.2	N.N.E.	0.2	N.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
0.0	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	17
1.0	W.N.W.	1.0	—	—	—	—	—	—	—	—	—	—	—	—	18
0.0	—	0.0	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.	0.2	W.N.W.	0.2	W.N.W.	0.2	19
0.0	—	0.0	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	N. by E.	0.2	N. by E.	0.5	E. by S.	1.0	20
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
0.2	S.S.W.	0.2	N.N.W.	1.0	N.W.	1.0	N.W.	0.2	N.W.	0.2	—	0.0	—	0.0	23
0.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24
0.2	N.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25
2.5	E.	2.5	N.E. by N.	0.2	N.E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	26
0.0	—	0.0	E.	1.5	E.	2.5	E.	2.5	E.	2.0	E.	1.5	E. by S.	1.0	27
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28
0.0	N.E. by N.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.2	N.	0.2	29

DECEMBER.





DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .			DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
Force.	Direction.	Force.	6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
lbs.		lbs.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0.2	N. by E.	0.2	N.N.E.	0.2	N.E. by N.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	E.N.E.	1.0	
2.0	S.W. by W.	2.0	S.W. by W.	1.5	S.W. by W.	1.0	S.W.	1.5	S.W. by S.	1.5	S.W. by S.	1.5	S.W.	0.2	
3.0	E.	3.0	E.	2.5	E.	2.5	E.	3.0	E.	3.0	E. by S.	3.0	E.	2.5	
5.0	S.W. by W.	5.0	W.S.W.	3.5	W.S.W.	3.5	S.W.	3.0	S.W.	3.0	S.W.	3.0	W.S.W.	2.5	
0.0	N.W.	0.2	N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
1.0	N.W. by N.	1.5	N.W.	2.5	N.W.	2.5	N.W.	3.5	N.W.	3.5	N.W.	3.0	W.N.W.	2.5	
3.5	W.S.W.	5.0	W.S.W.	6.5	W.S.W.	4.5	S.W. by W.	3.0	W.S.W.	2.5	S.W. by W.	2.5	S.W. by W.	2.0	
0.2	W.	0.2	W.	0.2	W.	0.2	W.S.W.	1.0	W. by N.	1.0	W. by N.	1.0	W. by N.	0.5	
1.0	S.W. by W.	2.0	W.S.W.	2.5	W.S.W.	2.0	W.	1.5	W.	1.0	W.S.W.	0.5	W.S.W.	1.5	
1.5	W.S.W.	1.5	W.	2.5	W.	2.0	W.	1.5	W.	0.5	W. by S.	0.2	—	0.0	
0.2	S.W.	0.2	S.W. by S.	0.2	S.W.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	1.5	
0.0	—	0.0	S.W. by S.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	—	0.0	
0.5	E.S.E.	0.5	E.S.E.	0.2	S.S.W.	0.2	S. by W.	0.2	S.	0.2	E.S.E.	0.2	—	0.0	
2.0	W. by S.	2.0	N.W. by W.	3.5	W.N.W.	3.5	N.W.	3.5	N.W.	4.5	W.N.W.	4.0	W.N.W.	3.0	
3.0	—	0.0	—	0.0	—	0.0	W.S.W.	0.5	W. by S.	2.0	W.	1.5	W. by S.	0.5	
0.0	W. by S.	3.0	W.	3.0	W.N.W.	2.5	W. by N.	2.5	W. by N.	2.5	W. by N.	2.5	W. by N.	1.5	
0.2	W.S.W.	0.5	W.S.W.	1.5	S.W. by W.	1.5	S.W.	1.0	S.W.	1.0	W.S.W.	0.5	W.S.W.	0.5	
3.0	N.W.	2.5	N.W. by N.	1.5	N.N.E.	1.0	E.	1.5	E.	1.0	N. by W.	0.5	N. by W.	0.2	
1.5	S.W. by W.	1.0	W.S.W.	1.5	W.S.W.	1.5	W. by S.	1.0	W. by S.	1.5	W.S.W.	1.0	S.W.	1.5	
2.0	W.	2.5	W.N.W.	2.0	W. by N.	3.0	W. by N.	2.0	W. by N.	1.5	W. by N.	1.0	—	0.0	
0.5	E.N.E.	0.5	E.N.E.	0.5	E. by S.	0.2	E. by N.	0.2	E. by S.	0.2	E. by S.	0.5	E. by S.	0.5	
0.5	N.	0.5	S.	0.5	N.W. by W.	0.5	N.W. by N.	0.5	N.N.W.	0.5	N.W. by N.	0.5	N.W.	0.5	
0.5	N.N.W.	0.5	N.N.W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	0.5	N. by W.	0.5	N.	0.2	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
0.0	N.E.	0.2	N.E.	0.2	N.E. by E.	0.5	E. by N.	1.0	N.E. by E.	2.0	N.E.	1.5	N.E.	1.0	
2.0	N. by W.	3.0	N.W.	2.5	N.W. by N.	2.0	N.W. by N.	2.0	N.N.W.	2.0	N. by W.	0.5	N. by W.	0.5	

JANUARY.

17 <sup>h</sup> .			DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
Force.	Direction.	Force.	18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
lbs.		lbs.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
2.0	E.	2.5	S.E.	1.0	—	0.0	W.	1.5	W.S.W.	1.5	W.S.W.	1.5	S.W.	2.0	
0.0	—	0.0	—	0.0	N.E. by N.	0.2	E.	0.2	E.	0.5	E.	2.0	E. by N.	2.5	
1.0	S.	4.0	S.W. by S.	3.5	W.N.W.	3.0	S.W. by S.	3.0	S.W. by S.	3.5	S.W. by S.	3.5	S.W.	4.5	
1.5	W.S.W.	1.5	W. by N.	1.5	W.N.W.	1.0	W. by N.	1.0	W. by S.	1.0	W. by S.	0.2	—	0.0	
0.2	N. by E.	0.5	N. by E.	0.5	N.	0.2	N. by E.	0.2	N. by E.	0.2	N.	0.2	N.	0.2	
2.5	W. by N.	1.5	W. by N.	1.0	W.	0.5	W.	0.5	W. by S.	3.0	W.S.W.	3.5	S.W. by W.	3.5	
1.0	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	0.5	W.S.W.	0.5	W. by S.	0.5	W. by S.	0.5	W. by S.	0.5	
1.0	W.S.W.	1.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
0.0	W.S.W.	1.0	—	0.0	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	1.0	S.W. by W.	0.5	S.W. by W.	0.5	
0.0	—	0.0	—	0.0	W. by S.	0.5	S.W.	1.5	S.W.	0.2	S.W. by S.	0.2	S.S.W.	0.2	
0.2	S.W. by W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
0.0	N.N.E.	0.5	N. by E.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	E. by S.	1.0	
2.5	W. by N.	1.5	—	—	—	—	—	—	—	—	—	—	W. by N.	0.5	
1.5	W. by N.	0.2	E.S.E.	1.0	E.S.E.	0.2	S.E. by E.	0.2	S.E.	0.2	S.E. by S.	0.2	S. by E.	0.2	
1.5	S.W. by W.	1.5	W.N.W.	0.5	W.N.W.	1.0	N.W. by W.	2.0	N.W.	2.5	N.W. by W.	3.0	W.N.W.	2.0	
0.5	W.S.W.	0.5	S.W. by W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	
0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.5	W.S.W.	0.2	W. by N.	0.2	W. by N.	0.2	W. by N.	0.2	
0.5	W.S.W.	1.0	W.S.W.	1.0	W.S.W.	1.5	W.S.W.	2.0	W.S.W.	1.5	W.S.W.	1.5	W.S.W.	1.5	
2.5	W.S.W.	2.0	W.S.W.	3.0	S.W.	3.5	S.W.	3.0	S.W.	3.5	S.W.	3.5	S.W.	2.5	
0.0	—	0.0	—	—	—	—	—	—	—	—	—	—	—	—	
0.2	E. by N.	0.5	N.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
0.2	N.W.	0.2	E. by N.	0.5	E. by N.	1.0	E.	1.5	E.	1.5	E.	2.0	E.N.E.	2.5	
0.0	—	0.0	N. by E.	0.2	N.	0.5	N. by W.	0.5	—	0.0	N.N.W.	0.5	N. by E.	0.2	
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
0.0	N.N.E.	0.2	N.N.E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	—	0.0	
2.0	N. by E.	2.5	N. by E.	2.0	N.	2.0	N. by W.	2.5	N. by W.	2.5	N. by W.	2.0	N.N.W.	2.5	
1.5	N.W. by N.	0.5	—	—	—	—	—	—	—	—	—	—	—	—	
—	—	—	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2	—	0.0	

JANUARY.



DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.	—	lbs.
0'0	—	0'0
0'2	E.S.E.	0'2
0'2	E. by N.	0'2
3'0	N.W.	3'0
0'2	N. by E.	0'2
0'2	N. by W.	0'2
—	—	—
0'5	S.W.	0'5
0'2	W.S.W.	0'2
0'2	—	0'0
0'2	W. by N.	0'2
0'0	—	0'0
0'2	S.W. by W.	0'2
—	—	—
1'0	N.N.E.	1'0
0'5	N.E.	0'5
0'5	S.W.	0'5
0'2	S.E.	0'2
0'2	N.N.E.	0'2
0'5	N.E. by E.	0'5
—	—	—
0'2	N.	0'2
0'2	N. by W.	0'2
0'0	—	0'0
0'2	N.E. by N.	0'2
0'2	E. by S.	0'2
5'0	E.	5'5

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
E. by S.	0'2	—	0'0	S. by W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	1
E.S.E.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	S.E.	0'2	2
E.N.E.	0'2	E.N.E.	0'2	N.N.W.	0'5	N.N.W.	3'0	N.W.	3'0	N.N.W.	5'5	3
W.N.W.	1'5	N.W.	2'0	N.W.	2'5	N.W.	2'5	W. by N.	2'0	W.N.W.	1'5	4
N. by W.	0'2	N. by W.	0'2	S.W.	0'2	—	0'0	—	0'0	—	0'0	5
N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by E.	0'2	—	0'0	6
—	—	—	—	—	—	—	—	—	—	—	—	7
S.W.	0'2	S.W. by S.	0'2	S.W.	0'2	S.W.	0'2	S.W.	0'2	—	0'0	8
W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'2	—	0'0	9
N. by W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W.	0'2	S.W. by W.	0'5	S.W. by W.	0'2	10
W.	0'5	W. by S.	0'5	W. by S.	1'0	W. by S.	1'0	S.W. by W.	1'0	W.S.W.	0'5	11
—	0'0	S.S.W.	0'2	S. by W.	0'2	N. by W.	0'2	N. by W.	0'5	N. by W.	2'0	12
W.S.W.	0'2	W.S.W.	0'2	W.S.W.	1'0	W. by S.	0'5	W. by S.	1'0	W. by S.	2'0	13
—	—	—	—	—	—	—	—	—	—	—	—	14
N.	1'5	N.	1'5	N.	1'0	N.	0'5	N.N.E.	0'2	N.N.E.	0'2	15
N.E.	0'2	E. by N.	3'0	E.	3'0	E.N.E.	2'0	E. by N.	2'0	E.N.E.	1'0	16
N.W. by W.	0'5	S. by W.	1'0	W.S.W.	1'0	W.	1'0	W.	1'0	W.	0'5	17
S. by W.	0'2	S. by W.	0'2	S.S.E.	0'2	S.E. by S.	0'2	E. by S.	0'2	E.	0'2	18
N.N.E.	0'2	—	0'0	E.	0'2	—	0'0	—	0'0	—	0'0	19
E. by N.	1'0	E. by N.	1'0	E. by N.	1'0	E. by N.	0'5	E. by N.	0'5	E.N.E.	0'5	20
—	—	—	—	—	—	—	—	—	—	—	—	21
N.	0'2	N.N.E.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	22
—	0'0	—	0'0	—	0'0	—	0'0	N. by E.	0'2	—	0'0	23
E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	E. by S.	0'2	E.	0'2	E.N.E.	0'2	24
E.N.E.	0'2	E.N.E.	0'2	E. by S.	0'2	E.S.E.	0'2	S.E. by S.	0'2	—	0'0	25
E. by N.	0'5	E. by N.	1'5	E. by N.	1'0	E.N.E.	1'5	E. by N.	1'5	E. by N.	2'5	26
E.	5'5	E.	5'0	E.	3'5	E.	3'0	E.	1'5	E.	1'5	27
—	—	—	—	—	—	—	—	—	—	—	—	28

FEBRUARY.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.	—	lbs.
0'0	N.	0'2
0'0	—	0'0
0'0	N.W.	8'0
0'2	N.W. by W.	0'2
0'2	N. by W.	0'2
0'0	—	0'0
—	—	—
0'5	E. by N.	0'5
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	W.S.W.	0'2
—	—	—
—	—	—
1'0	N.E.	1'5
0'5	N.N.W.	0'5
0'2	N. by E.	0'2
0'2	E.N.E.	0'2
0'0	—	0'0
0'5	E.N.E.	1'0
—	—	—
0'0	—	0'0
0'0	—	0'0
0'2	N.N.E.	0'2
0'0	—	0'0
3'0	E.	3'5
3'5	S.W.	3'5

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
—	0'0	S.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	2
N.W.	5'0	N.W. by W.	7'0	W.N.W.	3'0	W.N.W.	4'0	W.N.W.	1'0	W.N.W.	5'0	3
N.W. by W.	0'2	N.W.	0'2	N.W. by N.	0'5	N.W. by N.	0'2	N.W. by N.	0'2	N.N.W.	0'2	4
N.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	5
—	—	—	—	—	—	—	—	—	—	—	—	6
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7
N.E.	0'5	N.N.E.	0'5	N. by E.	0'5	N.N.W.	0'5	N.N.W.	0'5	N.W. by W.	0'5	8
S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
—	0'0	—	0'0	—	0'0	N.W. by W.	0'2	W. by N.	0'2	—	0'0	12
—	—	—	—	—	—	—	—	—	—	—	—	13
N.E.	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	14
N.N.W.	1'5	E.N.E.	1'5	E. by N.	3'0	E.	3'0	E.	3'0	E.N.E.	1'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
E.S.E.	0'2	E.N.E.	0'2	E.S.E.	0'5	N.E. by N.	0'5	N.E. by N.	0'5	—	0'0	18
—	0'0	—	0'0	E. by S.	0'5	E. by S.	0'5	E. by S.	0'5	E.N.E.	0'5	19
—	—	—	—	—	—	—	—	—	—	—	—	20
N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'5	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
N.E.	0'2	N.E. by E.	0'5	E.N.E.	0'5	N.E.	0'2	N.E.	0'2	N.E.	0'2	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
E.	3'5	E.	3'5	E.	3'5	E.	3'5	E.	4'0	E.	4'0	26
—	—	—	—	—	—	—	—	—	—	—	—	27
N.W. by W.	1'5	W.N.W.	1'5	W.N.W.	2'5	N.W. by W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	28

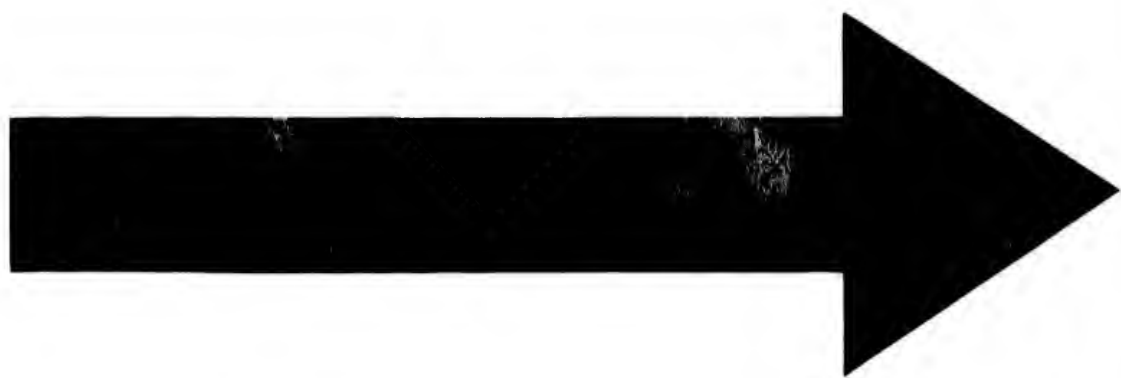
FEBRUARY.

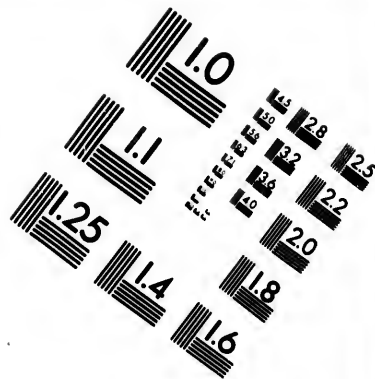
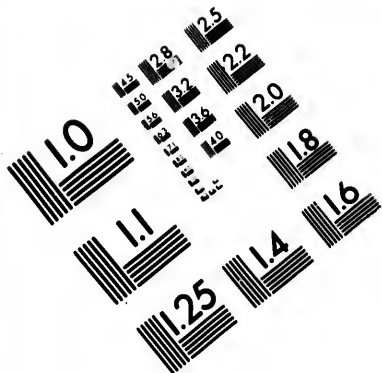
DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
MARCH	1	W.	0.5	W.N.W.	0.5	W.N.W.	1.0	N.W. by W.	1.5	N.W.	3.0	N.W.	2.5
	2	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.5
	3	—	0.0	S. by E.	0.2	S. by E.	0.2	S.S.E.	0.2	S.E. by S.	0.2	S.E. by S.	0.2
	4	N.W. by N.	0.2	—	0.0	N.W. by N.	0.2	N.W.	0.2	N.N.W.	0.2	N. by W.	0.2
	5	E.	0.2	N.E. by N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0
	6	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E. by N.	0.5	E.	0.5
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	0.0	—	0.0	E.	0.2	E.	0.5	N.W.	0.5	W.N.W.	0.5
	9	N.N.E.	0.2	N.E.	0.5	E.N.E.	0.5	E. by N.	1.5	E.	2.5	E.	1.5
	10	N.W. by N.	0.2	N.W. by N.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	S.W. by W.	0.5
	11	N. by W.	0.2	—	0.0	—	0.0	W.	0.2	N.	0.2	N. by E.	0.2
	12	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.2	N.W.	0.2	N. by E.	0.2
	13	N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0	—	0.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	W. by S.	0.5	S.W. by W.	0.5	S.W. by W.	1.5	W.S.W.	2.0	W.S.W.	1.5	W. by S.	1.0
	16	W. by N.	0.2	W.N.W.	0.2	W.N.W.	0.5	N.W. by W.	0.2	W.N.W.	0.2	W. by N.	0.2
	17	W.	0.2	W.	0.2	W.	0.5	W. by S.	1.0	W. by S.	1.0	S.S.W.	0.5
	18	—	0.0	—	0.0	S.W.	0.2	—	0.0	W.S.W.	0.2	S.W.	0.2
	19	—	0.0	—	0.0	—	0.0	N. by E.	0.2	N. by E.	0.2	S.S.E.	0.2
	20	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2	E.	0.2	E.	0.2	E.	0.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	N.E.	0.5	N.E.	0.5	E. by N.	0.5	E. by N.	0.2	E.	0.2	E.	0.2
	23	—	0.0	S.E. by S.	0.2	—	0.0	E.S.E.	0.2	—	0.0	S.	0.2
	24	W.	0.2	W.N.W.	0.5	W.N.W.	1.0	W.N.W.	0.5	W.N.W.	0.5	W.	0.5
	25	W.N.W.	0.5	W.N.W.	0.5	W.S.W.	0.5	W.	2.0	W.	2.0	W.	2.0
	26	N.N.W.	0.5	N.N.W.	0.5	N.W.	1.0	N.W. by N.	1.0	N.	1.0	N. by W.	1.5
	27	N.W. by N.	1.5	N.N.W.	1.0	N.W. by N.	1.5	N.W. by N.	5.0	N.W. by N.	5.0	N.W. by N.	6.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	E. by N.	0.2	E.N.E.	0.2	N.E.	0.2	—	0.0	E.S.E.	0.2	E.S.E.	0.2
	30	E.N.E.	0.2	N.E.	0.2	E.N.E.	0.2	E.	1.0	E.N.E.	0.5	E.	0.5
	31	—	0.0	N.	0.5	N. by W.	1.0	N.	1.5	N. by W.	0.5	N. by W.	0.5
<i>(continued)</i>													
Mean Göttingen Time.	12 <sup>h</sup> .		1 <sup>h</sup> .		11 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
MARCH	1	W.N.W.	2.5	W.	1.0	W. by N.	0.5	W.	0.5	W.N.W.	0.5	W.N.W.	0.5
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N. by W.	0.2
	4	—	0.0	—	0.0	N.N.E.	0.2	—	0.0	—	0.0	—	0.0
	5	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	6	E. by N.	1.5	E. by N.	1.5	E.	2.0	E. by N.	2.0	E.	2.0	E. by N.	1.0
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	N.	1.5	N.	0.5	N.	0.5	N.	0.2	N.	0.2	—	0.0
	9	E.	2.0	E.	2.5	E.	2.5	E.	2.5	E. by S.	2.0	E.S.E.	0.5
	10	W.	1.5	W.N.W.	0.5	N.W. by W.	1.5	N. by W.	2.0	N. by W.	1.5	N. by W.	1.0
	11	N.N.E.	0.2	N.N.E.	0.2	—	0.0	N. by W.	0.5	N. by W.	0.5	N. by W.	0.2
	12	S.W. by S.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2	N. by W.	0.5	N.	1.0
	13	W.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	—	0.0	—	0.0	—	0.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	W.S.W.	1.5	W. by S.	0.2	W.	0.2	W. by S.	0.2	—	0.0	—	0.0
	16	N.W. by N.	2.0	W.N.W.	1.0	W.N.W.	1.5	W.N.W.	0.5	W. by N.	0.2	W.	0.2
	17	S.S.W.	1.0	S.W. by S.	0.5	S.W.	0.5	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2
	18	N.W.	2.0	N.W. by W.	1.0	N.W. by W.	1.0	N.N.W.	0.2	N.N.W.	0.2	W.N.W.	0.2
	19	S.E. by E.	0.2	—	0.0	—	0.0	—	0.0	E. by N.	0.2	E. by N.	0.2
	20	—	0.0	—	0.0	—	0.0	N.N.W.	3.0	N.N.W.	3.0	N.N.W.	2.5
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	S.E. by S.	0.2	—	0.0	S. by E.	0.2	S. by E.	0.2	—	0.0	—	0.0
	23	W.	0.2	—	0.0	—	0.0	W.	1.0	W. by N.	1.0	W. by S.	1.0
	24	S. by W.	0.5	S.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.E. by S.	0.2
	25	W.N.W.	0.5	W.N.W.	0.2	W.N.W.	0.2	—	0.0	—	0.0	—	0.0
	26	N.N.W.	3.0	N. by W.	3.0	N.	3.0	N. by W.	3.0	N. by W.	3.0	N. by W.	3.0
	27	N.W.	2.5	N.W. by W.	2.0	N.W. by W.	3.0	W.N.W.	2.5	W.N.W.	0.5	W.N.W.	0.5
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	N.	1.0	N. by E.	0.5	N.N.E.	0.2	N.E.	0.2	N.E.	0.2	E.N.E.	0.2
	30	E.S.E.	1.0	E.S.E.	1.5	E.S.E.	1.5	N.E.	1.5	N.E.	0.5	N.E. by N.	0.5
	31	N.	0.2	N.	0.2	N.	0.2	—	0.0	—	0.0	—	0.0

DIRECTION AND FORCE OF THE WIND.															
5 <sup>h</sup> .			6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
1 <sup>h</sup>	N.W.	2 <sup>h</sup>	W.N.W.	2 <sup>h</sup>	W. by N.	2 <sup>h</sup>	W. by N.	2 <sup>h</sup>	W. by N.	2 <sup>h</sup>	W.N.W.	2 <sup>h</sup>	W.N.W.	2 <sup>h</sup>	1
0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	S.W.	0 <sup>h</sup>	S.W.	0 <sup>h</sup>	S.W.	0 <sup>h</sup>	2
0 <sup>h</sup>	S.E. by S.	0 <sup>h</sup>	S.S.E.	0 <sup>h</sup>	S.E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E. by S.	0 <sup>h</sup>	E. by S.	0 <sup>h</sup>	—	0 <sup>h</sup>	3
0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	—	0 <sup>h</sup>	N.N.W.	0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	N.W.	0 <sup>h</sup>	—	0 <sup>h</sup>	4
0 <sup>h</sup>	—	0 <sup>h</sup>	S.	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	S.	0 <sup>h</sup>	S. by E.	0 <sup>h</sup>	S.S.E.	0 <sup>h</sup>	5
0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E. by N.	1 <sup>h</sup>	E. by N.	1 <sup>h</sup>	6
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	7
0 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N. by E.	1 <sup>h</sup>	N.	0 <sup>h</sup>	N.	0 <sup>h</sup>	N.	1 <sup>h</sup>	8
2 <sup>h</sup>	E.	1 <sup>h</sup>	E.	1 <sup>h</sup>	E. by N.	2 <sup>h</sup>	E. by N.	3 <sup>h</sup>	E.	1 <sup>h</sup>	E. by N.	1 <sup>h</sup>	E.	2 <sup>h</sup>	9
0 <sup>h</sup>	S.W. by W.	0 <sup>h</sup>	W.S.W.	2 <sup>h</sup>	W.S.W.	2 <sup>h</sup>	W.	3 <sup>h</sup>	W.	3 <sup>h</sup>	W.	3 <sup>h</sup>	W.	3 <sup>h</sup>	10
0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	11
0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	S.S.W.	0 <sup>h</sup>	S.W. by S.	0 <sup>h</sup>	S.W. by S.	0 <sup>h</sup>	12
0 <sup>h</sup>	—	0 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	S.S.W.	0 <sup>h</sup>	S.W. by S.	0 <sup>h</sup>	S.W.	0 <sup>h</sup>	13
1 <sup>h</sup>	W. by S.	1 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W.S.W.	1 <sup>h</sup>	W.S.W.	1 <sup>h</sup>	W.S.W.	1 <sup>h</sup>	W.S.W.	1 <sup>h</sup>	14
0 <sup>h</sup>	W. by N.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	N.W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	N.W.	1 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	15
1 <sup>h</sup>	S.S.W.	0 <sup>h</sup>	S.S.W.	1 <sup>h</sup>	S.S.W.	1 <sup>h</sup>	S.S.W.	1 <sup>h</sup>	S.S.W.	1 <sup>h</sup>	S.S.W.	1 <sup>h</sup>	S.S.W.	1 <sup>h</sup>	16
0 <sup>h</sup>	S.W.	0 <sup>h</sup>	S.S.W.	0 <sup>h</sup>	S. by W.	0 <sup>h</sup>	S.	0 <sup>h</sup>	S. by W.	0 <sup>h</sup>	N.W.	0 <sup>h</sup>	N.W. by W.	2 <sup>h</sup>	17
0 <sup>h</sup>	S.S.E.	0 <sup>h</sup>	S.S.E.	0 <sup>h</sup>	S. by E.	0 <sup>h</sup>	S.S.E.	0 <sup>h</sup>	S.	0 <sup>h</sup>	S.S.E.	0 <sup>h</sup>	S.E. by E.	0 <sup>h</sup>	18
0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	N.E. by N.	0 <sup>h</sup>	N.E. by N.	0 <sup>h</sup>	—	0 <sup>h</sup>	19
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	20
0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	21
0 <sup>h</sup>	S.	0 <sup>h</sup>	S.S.W.	0 <sup>h</sup>	S.W.	0 <sup>h</sup>	W. by S.	1 <sup>h</sup>	W. by N.	1 <sup>h</sup>	—	0 <sup>h</sup>	W. by N.	0 <sup>h</sup>	22
0 <sup>h</sup>	W.	0 <sup>h</sup>	W. by N.	0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	S.W. by W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	S.W. by S.	0 <sup>h</sup>	23
2 <sup>h</sup>	W.	2 <sup>h</sup>	W. by N.	2 <sup>h</sup>	W.	2 <sup>h</sup>	W.	1 <sup>h</sup>	W. by N.	1 <sup>h</sup>	W. by N.	1 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	24
1 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N.W. by N.	1 <sup>h</sup>	N.W. by N.	1 <sup>h</sup>	N.W. by N.	1 <sup>h</sup>	N.W. by N.	2 <sup>h</sup>	N.N.W.	2 <sup>h</sup>	N. by W.	3 <sup>h</sup>	25
5 <sup>h</sup>	N.W. by N.	6 <sup>h</sup>	N.	6 <sup>h</sup>	S.S.W.	6 <sup>h</sup>	W.S.W.	1 <sup>h</sup>	N.N.W.	1 <sup>h</sup>	N.W.	1 <sup>h</sup>	N.W.	1 <sup>h</sup>	26
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	27
0 <sup>h</sup>	E.S.E.	0 <sup>h</sup>	N. by W.	2 <sup>h</sup>	N.	2 <sup>h</sup>	N.	2 <sup>h</sup>	N.	2 <sup>h</sup>	N.	2 <sup>h</sup>	N.	2 <sup>h</sup>	28
0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	1 <sup>h</sup>	E. by S.	2 <sup>h</sup>	E. by S.	1 <sup>h</sup>	E. by N.	1 <sup>h</sup>	E. by N.	1 <sup>h</sup>	E.N.E.	1 <sup>h</sup>	29
0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N.	0 <sup>h</sup>	N.	0 <sup>h</sup>	30
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	31

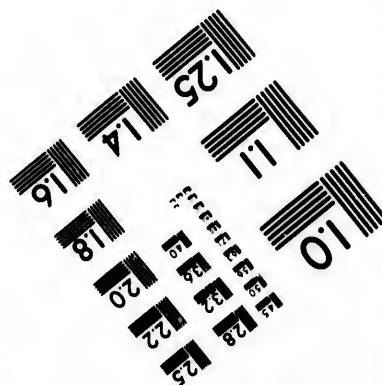
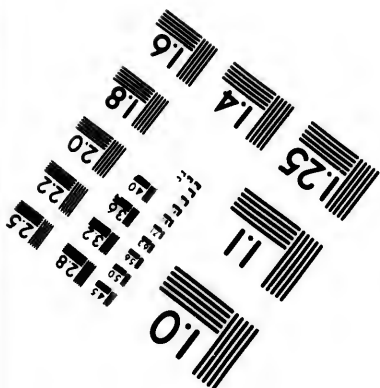
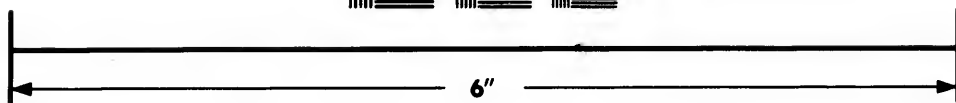
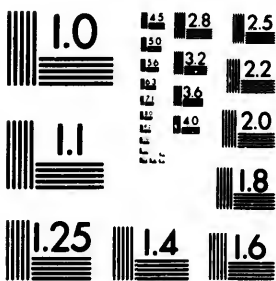
  

DIRECTION AND FORCE OF THE WIND.															
17 <sup>h</sup> .			18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	N.W.	1 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	W.N.W.	1 <sup>h</sup>	—	0 <sup>h</sup>	1
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W. by N.	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	2
0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	—	0 <sup>h</sup>	N.W.	0 <sup>h</sup>	N.W.	0 <sup>h</sup>	N.W.	1 <sup>h</sup>	N.N.W.	1 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	3
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	4
0 <sup>h</sup>	E. by N.	1 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	5
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	6
0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	7
0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	8
2 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	N.E. by E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	9
1 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N.W. by N.	0 <sup>h</sup>	N.N.W.	0 <sup>h</sup>	N.N.W.	0 <sup>h</sup>	N.N.W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	10
0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	N. by W.	0 <sup>h</sup>	11
0 <sup>h</sup>	N.	1 <sup>h</sup>	N.	1 <sup>h</sup>	N.	1 <sup>h</sup>	N.	1 <sup>h</sup>	N.	0 <sup>h</sup>	N.	0 <sup>h</sup>	N.	0 <sup>h</sup>	12
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	13
0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	N.W.	1 <sup>h</sup>	W. by N.	1 <sup>h</sup>	W.	2 <sup>h</sup>	W.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	14
0 <sup>h</sup>	—	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W. by S.	0 <sup>h</sup>	W.	0 <sup>h</sup>	15
0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	16
0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	W.	0 <sup>h</sup>	17
0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	W.S.W.	0 <sup>h</sup>	18
0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E. by N.	0 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	19
3 <sup>h</sup>	N.N.W.	2 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	20
0 <sup>h</sup>	—	0 <sup>h</sup>	N.E.	1 <sup>h</sup>	N.E.	1 <sup>h</sup>	N.E.	1 <sup>h</sup>	N.E.	1 <sup>h</sup>	N.E.	1 <sup>h</sup>	N.E.	1 <sup>h</sup>	21
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	S. by E.	0 <sup>h</sup>	S. by E.	0 <sup>h</sup>	S. by E.	0 <sup>h</sup>	—	0 <sup>h</sup>	22
1 <sup>h</sup>	W. by S.	1 <sup>h</sup>	W.	2 <sup>h</sup>	W. by S.	1 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W.N.W.	0 <sup>h</sup>	W. by N.	0 <sup>h</sup>	23
0 <sup>h</sup>	S.E. by S.	0 <sup>h</sup>	S.E.	0 <sup>h</sup>	E. by S.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	24
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	25
1 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N. by W.	5 <sup>h</sup>	N. by W.	1 <sup>h</sup>	N. by W.	6 <sup>h</sup>	N. by W.	5 <sup>h</sup>	N. by W.	5 <sup>h</sup>	N.W. by N.	4 <sup>h</sup>	26
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	27
0 <sup>h</sup>	S.E.	0 <sup>h</sup>	S.E.	0 <sup>h</sup>	S.E.	0 <sup>h</sup>	E.S.E.	0 <sup>h</sup>	E. by N.	1 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	E.S.E.	0 <sup>h</sup>	28
0 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	E.N.E.	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	29
0 <sup>h</sup>	N.E. by N.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	N.N.E.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	N.	0 <sup>h</sup>	N.	0 <sup>h</sup>	N. by E.	0 <sup>h</sup>	30
0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	0 <sup>h</sup>	—	—	—	0 <sup>h</sup>	31





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DIRECTION AND FORCE OF THE WIND.													
Mean Güttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.S.E.	0 <sup>2</sup>	S.E.	0 <sup>2</sup>	S.S.E.	0 <sup>2</sup>
	2	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	—	—	—	—	—
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	S. by W.	0 <sup>2</sup>
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.	0 <sup>2</sup>
	6	E. by N.	1 <sup>0</sup>	E. by N.	0 <sup>5</sup>	E.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>
	7	W.S.W.	0 <sup>2</sup>	W.	0 <sup>5</sup>	W.N.W.	1 <sup>5</sup>	N.W. by W.	1 <sup>0</sup>	N.W. by W.	2 <sup>0</sup>	W.N.W.	1 <sup>5</sup>
	8	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	S.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	9	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	1 <sup>0</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>
	10	W.S.W.	0 <sup>2</sup>	W.N.W.	0 <sup>5</sup>	N.W. by W.	2 <sup>5</sup>	W.N.W.	3 <sup>0</sup>	W.N.W.	3 <sup>5</sup>	W.N.W.	3 <sup>5</sup>
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	W.N.W.	1 <sup>5</sup>	N.W. by W.	2 <sup>5</sup>	N.W. by W.	3 <sup>0</sup>	N.W.	3 <sup>5</sup>
	13	—	0 <sup>0</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>
	14	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	0 <sup>5</sup>	S. by W.	0 <sup>5</sup>
	15	N.W.	0 <sup>2</sup>	W.N.W.	0 <sup>5</sup>	N.W.	1 <sup>5</sup>	N.N.W.	1 <sup>5</sup>	N. by W.	0 <sup>5</sup>	N. by W.	1 <sup>0</sup>
	16	—	0 <sup>0</sup>	N.W. by W.	0 <sup>2</sup>	W. by N.	0 <sup>2</sup>	S.	0 <sup>2</sup>	S. by W.	0 <sup>5</sup>	S. by W.	1 <sup>5</sup>
	17	W. by N.	1 <sup>0</sup>	N.W.	1 <sup>0</sup>	N.W.	3 <sup>0</sup>	N.W. by W.	2 <sup>5</sup>	N.W.	2 <sup>0</sup>	W.N.W.	2 <sup>5</sup>
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>
	20	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.E.	0 <sup>2</sup>	S.E. by S.	0 <sup>2</sup>
	21	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E. by E.	0 <sup>2</sup>	W. by N.	0 <sup>2</sup>	N.W.	1 <sup>0</sup>	W. by S.	1 <sup>0</sup>
	22	S.E.	0 <sup>2</sup>	S.E.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.	0 <sup>2</sup>
	23	N.E. by N.	0 <sup>2</sup>	N.E. by N.	1 <sup>0</sup>	N.E. by N.	1 <sup>0</sup>	N. by E.	0 <sup>5</sup>	N.N.E.	0 <sup>5</sup>	N. by E.	0 <sup>5</sup>
	24	N.N.E.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	S.E. by E.	0 <sup>2</sup>	S.E.	0 <sup>2</sup>
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	—	—	—	—	—	—	—
	27	—	0 <sup>0</sup>	N.W.	2 <sup>0</sup>	N.N.W.	3 <sup>0</sup>	N.N.W.	3 <sup>5</sup>	N.N.W.	3 <sup>0</sup>	N.N.W.	3 <sup>0</sup>
	28	—	0 <sup>0</sup>	—	0 <sup>0</sup>	W.N.W.	0 <sup>2</sup>	S.E. by S.	0 <sup>2</sup>	S.S.E.	0 <sup>2</sup>	S.E. by E.	0 <sup>2</sup>
	29	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N. by W.	0 <sup>5</sup>	E.N.E.	0 <sup>2</sup>
	30	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.W.	1 <sup>0</sup>	N.W.	2 <sup>0</sup>	N.W.	1 <sup>5</sup>

(continued)

Mean Güttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.S.E.	1 <sup>0</sup>	E.S.E.	1 <sup>5</sup>	E. by S.	1 <sup>5</sup>	E.S.E.	1 <sup>0</sup>
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	E. by N.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E. by N.	1 <sup>0</sup>	E. by N.	1 <sup>0</sup>	E. by N.	1 <sup>5</sup>
	6	W.	4 <sup>5</sup>	W.	3 <sup>0</sup>	W.	0 <sup>5</sup>	W.	1 <sup>5</sup>	W. by S.	1 <sup>5</sup>	W. by S.	1 <sup>0</sup>
	7	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.S.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	8	N. by W.	3 <sup>5</sup>	N. by W.	2 <sup>5</sup>	N.W. by N.	1 <sup>0</sup>	N.N.W.	1 <sup>0</sup>	N. by W.	1 <sup>5</sup>	N. by W.	1 <sup>5</sup>
	9	S.S.W.	1 <sup>5</sup>	S.W. by S.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>
	10	N.N.W.	1 <sup>0</sup>	N.W. by N.	1 <sup>0</sup>	N.N.W.	1 <sup>0</sup>	N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N.N.W.	2 <sup>5</sup>	N.W.	0 <sup>2</sup>	N.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	13	S.W. by S.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	14	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>
	15	N.N.W.	1 <sup>0</sup>	N. by W.	1 <sup>0</sup>	N. by W.	0 <sup>5</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>
	16	S.E. by S.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.	0 <sup>5</sup>	N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	17	W.N.W.	2 <sup>0</sup>	W.N.W.	2 <sup>0</sup>	N.W.	2 <sup>5</sup>	N.W.	2 <sup>5</sup>	N.W.	3 <sup>5</sup>	N.W.	3 <sup>0</sup>
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	S.S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	20	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E. by S.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>
	21	W.S.W.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	W. by S.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	S.S.E.	0 <sup>2</sup>
	22	N.E. by N.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	N.N.E.	1 <sup>0</sup>	N.N.E.	1 <sup>0</sup>	N. by E.	0 <sup>5</sup>
	23	S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.	0 <sup>2</sup>
	24	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	S.S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>
	27	N.N.W.	2 <sup>5</sup>	N.N.W.	1 <sup>0</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>
	28	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	1 <sup>5</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>5</sup>
	29	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	30	N.W. by W.	2 <sup>5</sup>	N.W. by N.	1 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 0'2	S.S.E.	lbs. 0'2
0'0	S. by W.	0'2
0'2	E.	0'2
0'2	E. by S.	0'2
2'0	W.N.W.	1'5
0'0	—	0'0
0'2	S.S.W.	0'2
3'5	W.N.W.	3'5
3'0	N.W.	3'5
0'2	S. by W.	0'2
0'5	S. by W.	0'5
0'5	N. by W.	1'0
0'5	S. by W.	1'5
2'0	W.N.W.	2'5
0'2	S.W.	0'2
0'2	S.E. by S.	0'2
1'0	W. by S.	1'0
0'2	N.	0'2
0'5	N. by E.	0'5
0'2	S.E.	0'2
0'0	S.S.W.	0'2
3'0	N.N.W.	3'0
0'2	S.E. by E.	0'2
0'5	E.N.E.	0'2
2'0	N.W.	1'5

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
S.E. by E.	0'2	E. by S.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E.	0'2	1
S. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
E.	0'2	E. by S.	0'2	E.S.E.	0'2	E. by S.	0'2	E.	0'2	E. by N.	0'2	3
E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'2	W.	4'0	4
W.N.W.	2'0	W.N.W.	1'5	W. by N.	1'0	W.	1'0	S.W.	0'5	W. by S.	0'2	5
W. by S.	0'2	S.E. by S.	0'2	—	0'0	—	0'0	N.	2'0	N. by W.	1'5	6
S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S. by W.	0'2	S. by W.	0'2	S.S.W.	1'0	7
N.W.	3'0	N.W. by N.	3'0	N.N.W.	2'5	N.N.W.	2'5	N.W.	2'0	N.W.	2'5	8
N.W. by W.	3'5	N.W.	3'5	W.N.W.	4'0	N.W. by W.	3'5	N.W. by N.	3'5	N.W.	3'5	9
S.	0'2	S.	0'5	S. by W.	1'5	S.S.W.	1'5	S.S.W.	1'5	S.S.W.	1'5	10
S. by W.	0'5	S.S.E.	0'5	E.S.E.	0'5	E.S.E.	0'5	E. by S.	0'5	E.S.E.	0'5	11
N.N.W.	0'5	N.N.W.	0'5	N.	0'5	N.	1'0	W.S.W.	0'5	N.N.W.	0'5	12
S.	1'5	S. by E.	1'5	S. by W.	2'5	S.S.W.	2'0	S.W. by S.	1'0	S.W. by S.	0'2	13
N.W. by W.	2'0	N.W. by W.	2'0	N.W.	2'0	W.N.W.	2'0	W.N.W.	1'5	W.N.W.	2'0	14
S.W.	0'2	S.W.	0'5	S.W.	1'0	S.W.	0'5	S. by W.	0'2	S.S.W.	0'2	15
S.E. by S.	0'2	—	0'0	—	0'0	S.E.	0'2	—	0'0	—	0'0	16
W.S.W.	1'0	W.S.W.	1'0	W.S.W.	1'0	W.S.W.	1'0	W.S.W.	0'5	W.S.W.	0'2	17
N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'5	N.E.	0'5	N.E.	0'2	N.E. by N.	0'2	18
N. by W.	1'0	N.	0'2	N.E.	0'2	N.W.	0'2	S. by E.	0'2	S.	0'2	19
S.E. by S.	0'2	S.E.	0'5	S.E.	0'2	S.S.E.	0'2	—	0'0	—	0'0	20
S.S.W.	0'2	S.	0'2	S.	0'2	S.	0'2	N. by E.	0'2	—	0'0	21
N. by W.	3'0	N. by W.	2'5	N. by W.	3'0	N.N.W.	2'5	N. by W.	2'5	N.N.W.	2'5	22
S.E. by E.	0'2	E.	0'2	E. by S.	0'2	E.	0'2	E.N.E.	0'2	E. by N.	0'2	23
E.N.E.	0'2	E.	0'2	N.E. by N.	0'2	N.E. by N.	0'2	S.S.E.	0'2	—	0'0	24
N.W. by W.	1'5	W. by N.	2'0	N.W.	3'0	N.W.	2'0	N.W.	2'0	N.W. by N.	2'5	25

APRIL.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 1'5	E.S.E.	lbs. 1'0
0'0	—	0'0
1'0	E. by N.	1'5
1'5	W. by S.	1'0
0'0	—	0'0
1'5	N. by W.	1'5
0'2	S.W.	0'2
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	N.N.W.	0'2
0'2	N. by W.	0'2
0'0	—	0'0
3'5	N.W.	3'0
0'0	—	0'0
0'2	E. by S.	0'2
0'2	S.S.E.	0'2
1'0	N. by E.	0'5
0'0	E.	0'0
0'0	—	0'0
0'0	S.W.	0'2
0'2	S.W. by S.	0'2
0'2	N.N.W.	0'2
0'2	E.N.E.	0'2
0'0	—	0'0
0'0	—	0'0

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
N. by W.	1'0	N. by W.	1'0	N. by W.	0'2	—	0'0	—	0'0	—	0'0	2
E. by N.	1'5	E. by N.	1'0	E. by N.	2'0	E. by N.	1'0	E.	1'5	E. by N.	1'0	3
W. by S.	1'0	W. by S.	0'5	W. by S.	0'5	W. by S.	0'5	W. by S.	0'5	W.S.W.	0'2	4
E.N.E.	0'2	E. by S.	0'2	—	0'0	N.E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	5
N. by W.	1'5	N.N.W.	1'5	N.N.W.	1'0	N.N.W.	1'0	N.N.W.	0'2	—	0'0	6
S.W.	0'2	—	0'0	—	0'0	—	0'0	S.W.	0'2	—	0'0	7
—	0'0	—	0'0	S.E. by E.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	8
N.W. by N.	0'2	N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	9
—	0'0	N. by W.	2'0	N. by W.	2'0	N.N.W.	1'0	N.W. by N.	0'5	N.W. by N.	0'2	10
N.N.W.	0'2	N.W.	1'0	N.W.	1'5	N.W.	1'0	N.W.	0'2	N.W.	0'5	11
N. by W.	0'2	N.N.W.	0'2	N.N.W.	0'2	—	0'0	N.N.W.	0'2	—	0'0	12
—	0'0	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	W.	1'0	13
W.	0'2	—	0'0	—	0'0	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	14
—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	—	0'0	15
E.	0'2	E.S.E.	0'2	E. by S.	0'2	N.E.	0'5	N.E. by N.	0'2	—	0'0	16
E.N.E.	0'2	E.N.E.	0'2	N. by E.	0'2	E.S.E.	0'2	E.S.E.	0'2	S.E.	0'2	17
N. by E.	1'0	N.E. by N.	1'5	N.E. by N.	1'0	N.E. by N.	0'5	N.E. by N.	0'5	N.E. by N.	0'5	18
E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	19
S.W. by S.	0'2	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W.	0'2	20
S.W. by S.	0'2	N.W.	0'2	N. by W.	0'2	N.	1'0	N.	0'2	N.	0'2	21
N.N.W.	0'2	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	22
E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
—	0'0	—	0'0	—	0'0	N.N.W.	1'0	N.W. by W.	1'5	N.N.W.	0'5	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25

APRIL.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
MAY.	1	N.N.W.	0'2	N. by W.	0'2	N. by W.	0'2	S.	0'2	S.	0'5	S.	0'5
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	W. by N.	0'2	W.S.W.	0'2	W.S.W.	1'5	W.	3'0	W.	3'0	W.	2'5
	4	—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	S.	0'2
	5	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2	S.S.W.	0'2
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	—	0'0	—	0'0	—	0'0	W.	0'2	W.	0'2	E. by S.	0'2
	8	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'5	N.E. by E.	0'5	N.E.	0'5
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	0'0	—	0'0	—	0'0	E. by N.	1'0	E. by S.	0'5	E.	0'2
	11	—	0'0	—	0'0	—	0'0	S.E.	0'2	E.	0'2	E.	0'2
	12	S.E. by S.	0'2	—	0'0	S.E.	0'2	E.	0'2	E.	0'2	E.	0'2
	13	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	E.N.E.	0'2	E.	1'0	E.	1'0
	14	—	0'0	—	0'0	E. by N.	0'2	E. by N.	0'5	E.	0'5	E.S.E.	0'5
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	20	—	0'0	—	0'0	—	0'0	—	0'0	E. by N.	0'5	E. by S.	0'5
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2
	22	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W.	0'2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0'0	—	0'0	N.W.	0'2	N.W.	0'2	N.W.	0'2	—	0'0
	25	—	0'0	S.E.	0'2	S.E.	0'2	S.E.	0'2	—	0'0	E.	0'2
	26	W. by N.	0'2	W. by N.	0'2	W.N.W.	0'5	N.W. by W.	0'5	N.W. by W.	0'5	S. by W.	0'5
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2	E.S.E.	0'2
	29	E. by N.	0'5	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	E. by N.	2'5	E.N.E.	2'5	N.E. by E.	2'5	E.N.E.	3'0	E.N.E.	3'0	E.N.E.	2'5
(continued)													
Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
MAY.	1	—	0'0	—	0'0	—	0'0	E.	0'2	E.	0'2	E.N.E.	0'2
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	W. by N.	1'5	W.N.W.	1'0	W.N.W.	0'2	—	0'0	—	0'0	—	0'0
	4	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	—	0'0
	5	S.	0'5	S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	E. by N.	0'2	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	N. by W.	0'2
	8	N.	1'5	N.	2'0	N.	2'5	N. by E.	1'5	N. by E.	1'5	N. by E.	1'0
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	S. by E.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	12	E. by N.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	13	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	E.N.E.	0'2	N.E.	0'2
	14	—	0'0	—	0'0	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0
	15	E.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	E.	0'2	E.	0'2	E.	0'5	—	0'0	—	0'0	—	0'0
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	19	—	0'0	W.N.W.	0'2	N.N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'5	N.W. by N.	0'2
	20	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	21	—	0'0	W. by N.	0'2	W. by N.	0'2	—	0'0	—	0'0	—	0'0
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	W.	0'2	W.	0'2	—	0'0	W. by S.	0'2	N.W. by W.	3'5	N.W.	3'5
	26	S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0
	27	E.	0'2	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	28	E.S.E.	0'2	E.S.E.	0'2	N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N. by W.	0'5
	29	N.W. by N.	1'0	N.W.	1'5	N.N.W.	1'0	N. by W.	2'0	N.N.E.	0'5	N.N.E.	0'5
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	E.N.E.	2'5	E.N.E.	1'5	E.N.E.	0'5	E.N.E.	0'5	E. by N.	0'5	E. by N.	0'5

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 0'5	S.	0'5
—	—	—
3'0	W.	2'5
0'2	S.	0'2
0'2	S.S.W.	0'2
0'0	—	0'0
0'2	E. by S.	0'2
0'5	N.E.	0'5
—	—	—
0'5	E.	0'2
0'2	E.	0'2
0'2	E.	0'2
1'0	E.	1'0
0'5	E.S.E.	0'5
0'0	—	0'0
—	—	—
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	E. by S.	0'5
0'0	E.	0'2
0'2	S.W.	0'2
—	—	—
0'2	—	0'0
0'0	E.	0'2
0'5	S. by W.	0'5
0'0	—	0'0
0'2	E.S.E.	0'2
0'2	E.N.E.	0'2
3'0	E.N.E.	2'5

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
S.	0'5	S.E. by S.	0'2	S. by E.	0'2	—	0'0	—	0'0	—	0'0	1
—	—	—	—	—	—	—	—	—	—	—	—	2
W.	2'5	W.N.W.	2'0	W.N.W.	2'5	W. by N.	3'0	W.N.W.	2'5	W.N.W.	2'5	3
S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.	0'2	S. by W.	0'2	S. by W.	0'2	4
S. by E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S. by E.	0'5	5
S.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	—	0'0	6
E. by S.	0'2	E. by S.	0'2	E. by S.	0'5	E.	0'5	E. by N.	0'5	E. by N.	0'2	7
N.E.	0'2	E.N.E.	0'2	N.N.E.	0'2	N.E.	0'2	N.	0'2	N. by W.	2'0	8
—	—	—	—	—	—	—	—	—	—	—	—	9
E.	0'2	E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	10
E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'0	11
E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'5	N.E. by E.	0'5	E.N.E.	1'0	E.	1'0	12
E.	1'0	E. by S.	0'5	E. by S.	0'5	E. by S.	0'2	—	0'0	—	0'0	13
E.S.E.	0'5	E.S.E.	0'5	E.S.E.	0'5	E.S.E.	0'2	—	0'0	—	0'0	14
E.	0'2	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	15
—	—	—	—	—	—	—	—	—	—	—	—	16
E. by N.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	E.	0'2	E.	0'2	17
—	0'0	—	0'0	E. by S.	0'2	E.S.E.	0'2	—	0'0	—	0'0	18
E. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	—	0'0	20
—	0'0	E.	0'2	E.	0'2	E.	0'2	E. by N.	0'2	—	0'0	21
S. by W.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S. by W.	0'2	22
—	—	—	—	—	—	—	—	—	—	—	—	23
—	0'0	—	0'0	W.S.W.	0'2	W.S.W.	0'2	—	0'0	—	0'0	24
E.	0'2	E.	0'2	E.	0'2	S. by W.	0'5	S.S.E.	0'2	S.S.E.	0'2	25
S. by E.	0'5	S. by E.	0'5	S. by E.	0'5	S. by E.	0'5	S. by E.	0'2	S.S.E.	0'2	26
E.S.E.	0'5	E.	0'2	E.	0'2	E. by S.	0'2	E.	0'2	E.	0'2	27
S.E. by E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	28
—	0'0	N.E. by E.	0'2	N.E. by E.	0'2	—	0'0	N. by W.	0'2	N. by W.	0'5	29
E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	E.N.E.	2'5	30
—	—	—	—	—	—	—	—	—	—	—	—	31

MAY.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 0'2	E.N.E.	0'2
—	—	—
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	N. by W.	0'2
1'5	N. by E.	1'0
—	—	—
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	N.E.	0'2
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	N.W. by N.	0'2
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	N. by W.	0'5
0'5	N.N.E.	0'5
—	—	—
0'5	E. by N.	0'5

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	—	—	—	—	—	—	—	—	—	—	—	1
W. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	W. by S.	0'2	2
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	—	0'0	—	0'0	4
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
N. by W.	0'2	N.N.E.	0'2	N.E. by N.	0'2	N.E.	0'2	N.E.	1'0	S.W.	1'5	7
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
—	0'0	—	0'0	—	0'0	—	0'0	N.E. by E.	0'2	N.E. by E.	0'2	12
N.E. by N.	0'2	N.E.	0'2	N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	—	0'0	13
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
N.W. by N.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	—	0'0	19
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	20
—	0'0	S.S.E.	0'5	S. by W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	21
—	—	—	—	—	—	—	—	—	—	—	—	22
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
W.N.W.	2'5	W.N.W.	3'0	W.N.W.	1'5	W.N.W.	1'0	W.N.W.	0'5	W.N.W.	0'2	25
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
E. by N.	0'5	E. by N.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	N.E. by E.	0'5	28
—	—	—	—	—	—	—	—	—	—	—	—	29
E.	0'2	E.	0'5	E. by N.	1'0	E. by N.	1'0	E. by N.	1'0	E. by N.	2'0	30
N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	—	0'0	31

MAY.



DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0'2	S. by E.	0'2
0'0	N.W.	0'2
0'0	—	0'0
0'5	W.	0'5
0'5	W. by N.	0'5
—	—	—
0'2	S.S.E.	0'2
0'0	—	0'0
0'0	E. by N.	0'2
0'2	S.S.W.	0'5
0'5	S.	0'5
0'2	S. by W.	0'5
—	—	—
2'5	W. by N.	2'5
2'0	W.N.W.	2'5
0'2	W.N.W.	0'5
0'2	S.S.W.	0'2
0'2	E.	0'2
0'2	S.S.W.	1'0
—	—	—
0'2	S.W. by S.	0'2
0'0	S.E. by E.	0'2
0'2	S.S.W.	0'2
0'2	S.W.	0'2
0'2	S.S.E.	0'2
0'2	S.S.W.	0'5
—	—	—
0'5	N.W. by N.	0'2
0'0	—	0'0
0'2	E.S.E.	0'2

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0'0	—	0'0	—	0'0	S.W.	0'2	S.W. by W.	0'2	W.S.W.	0'2	1
—	0'0	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	2
S.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E. by S.	0'2	E.	0'2	3
W.	1'5	W.	2'5	W.	2'5	W.N.W.	2'5	W.N.W.	2'5	W.	1'5	4
E.S.E.	0'2	S. by E.	0'2	S.	0'5	S.	0'2	N.E. by N.	0'5	N.W. by N.	0'5	5
—	—	—	—	—	—	—	—	—	—	—	—	6
S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	—	0'0	S.E.	0'2	E.S.E.	0'2	7
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
S.E.	0'2	S.E.	0'2	S.E.	0'2	S.	0'2	S.S.W.	1'0	S.W. by S.	1'0	9
S. by W.	0'2	S.S.W.	0'5	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	10
S.W.	1'0	S.W. by S.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W. by W.	1'0	11
S.	0'2	S.	0'2	W.S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	12
—	—	—	—	—	—	—	—	—	—	—	—	13
W.N.W.	3'5	W.N.W.	3'5	N.W. by W.	3'0	W.N.W.	3'5	W.N.W.	5'0	N.W.	4'2	14
W.N.W.	2'0	W.	1'5	W. by N.	1'5	W.N.W.	1'5	W.N.W.	1'0	N.W.	1'0	15
W.N.W.	0'5	N.W.	0'5	N.W. by N.	0'5	N.W. by W.	0'5	N.W.	0'5	N.W.	0'2	16
S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	17
E. by S.	0'2	E.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'5	E. by N.	0'2	18
S.W.	1'0	N.N.W.	2'5	N.N.W.	1'0	N. by W.	0'2	N.N.W.	0'2	S.S.W.	0'2	19
—	—	—	—	—	—	—	—	—	—	—	—	20
S.W.	0'2	S.W.	0'2	S.W. by W.	0'2	S.W. by W.	0'2	S.W. by W.	0'2	—	0'0	21
—	0'0	—	0'0	—	0'0	S.E.	0'2	S.S.W.	0'2	S. by W.	0'2	22
S.S.W.	0'2	S. by W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	23
S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0	24
S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	—	0'0	E.	0'2	25
S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W.	1'0	26
—	—	—	—	—	—	—	—	—	—	—	—	27
N.W. by W.	0'2	W. by N.	0'2	N. by W.	0'2	N.	0'5	N.	0'5	N. by W.	0'2	28
N.	0'2	N.N.W.	0'2	S.W. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	29
S.E.	0'2	S.E.	0'2	S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	30

JUNE

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0'0	N.W.	0'5
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	—	0'0
—	—	—
0'0	—	0'0
0'0	—	0'0
0'0	N.E.	0'2
0'0	—	0'0
0'0	—	0'0
1'0	W.	1'0
0'0	—	0'0
—	—	—
1'5	W.N.W.	1'5
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	N. by W.	0'2
0'2	N.N.W.	0'2
0'0	—	0'0

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
N.W.	0'5	N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	—	0'0	1
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N. by E.	0'2	3
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	10
W.	0'5	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	2'0	W.N.W.	1'0	—	0'0	11
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	12
W.	1'0	W.	1'5	W.	1'5	W.	1'5	W.	1'5	W. by N.	1'0	13
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	W. by N.	0'2	14
N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
N.W. by W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	—	0'0	—	0'0	—	0'0	20
S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
—	0'0	—	0'0	N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
—	0'0	N.W.	0'2	N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	27
N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	28
N.N.W.	0'5	N. by W.	0'5	N. by W.	0'5	N.	0'5	N.	0'5	N.	0'2	29
N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0	—	0'0	30

JUNE

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
JULY.	1	—	0'0	N.N.E.	0'2	N.N.E.	0'2	—	0'0	E.	0'2	E.S.E.	0'2
	2	—	0'0	—	0'0	—	E.N.E.	0'2	—	E.S.E.	0'2	E.S.E.	0'2
	3	—	0'0	—	0'0	—	—	0'0	—	—	0'0	—	0'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	0'0	—	0'0	—	—	0'0	—	S.S.E.	0'2	S by E.	0'2
	6	—	0'0	—	0'0	—	—	0'0	—	—	0'0	—	0'0
	7	—	0'0	—	0'0	—	—	0'0	—	—	0'0	—	0'0
	8	—	0'0	—	0'0	—	S.S.W.	0'2	—	S by W.	0'2	S by W.	0'2
	9	—	0'0	—	0'0	—	—	0'0	—	S by E.	0'2	S by E.	0'2
	10	—	0'0	—	0'0	—	E.	0'2	—	E by S.	0'2	E.S.E.	0'2
	11	—	—	—	—	—	—	0'0	—	—	0'0	—	0'0
	12	—	0'0	E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S by E.	0'2
	13	N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.W.	0'2	N.N.W.	0'5
	14	N by W.	0'2	N by W.	0'2	N.	0'2	—	0'0	N.	0'2	S.E. by S.	0'2
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2
	16	—	0'0	—	0'0	S.W.	0'2	S by W.	0'2	S.S.W.	0'2	S by W.	0'2
	17	—	0'0	—	0'0	S.W.	0'5	S.W.	1'0	S.W. by S.	1'0	S.S.W.	1'5
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	0'0	—	0'0	—	0'0	S by W.	0'2	S by W.	0'2	S.	0'2
	20	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	0'2
	21	—	0'0	—	0'0	S.	0'2	S.S.W.	0'2	S.W. by S.	0'2	S.S.W.	0'2
	22	—	0'0	N by W.	0'2	N.N.W.	0'2	N.N.W.	0'5	N.	0'5	N.N.W.	0'5
	23	—	0'0	—	0'0	—	0'0	S.W.	0'2	S by E.	0'5	S by E.	0'2
	24	—	0'0	—	0'0	S.E. by S.	0'2	S.E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	N.	2'0	N.	1'0	N.	2'0	N.	2'0	N.	2'0	N.N.W.	1'5
	27	N by E.	0'2	N by E.	0'2	N by E.	0'2	E by S.	0'5	E.S.E.	0'2	S.E. by S.	0'2
	28	—	0'0	—	0'0	—	0'0	E by N.	0'2	S.E.	0'2	S.E.	0'2
	29	—	0'0	E.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.S.E.	0'2
	30	—	0'0	—	0'0	—	0'0	S.W.	0'2	S.S.W.	0'2	—	0'0
	31	—	0'0	—	0'0	—	0'0	E by S.	0'2	S.S.E.	0'2	S.S.E.	0'2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
JULY.	1	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	E.N.E.	0'2
	2	—	0'0	—	0'0	—	0'0	E by S.	0'2	E by S.	0'2	—	0'0
	3	S by E.	0'2	S by E.	0'2	S by E.	0'2	—	0'0	—	0'0	—	0'0
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	N.	0'2	N.	0'2	N.	0'2	—	0'0	—	0'0	—	0'0
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	7	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	9	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	10	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	13	N.N.W.	0'5	N.N.W.	0'5	—	0'0	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	15	S by W.	0'2	S by W.	0'2	S by W.	0'2	—	0'0	—	0'0	—	0'0
	16	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	—	0'0	—	0'0	—	0'0
	17	—	0'0	—	0'0	S by W.	0'2	—	0'0	—	0'0	—	0'0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	S.S.W.	0'2	S.W.	0'2	S.W.	0'2	—	0'0	S.W.	0'2	S.W.	0'2
	20	E.	0'5	S.E.	0'2	S.E.	0'2	S by E.	0'2	—	0'0	—	0'0
	21	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	22	N.W.	0'5	N.W.	0'2	N.W.	0'2	—	0'0	—	0'0	—	0'0
	23	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	24	E.N.E.	0'2	E.N.E.	0'2	—	0'0	E.N.E.	0'2	E.N.E.	0'2	—	0'0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	N by E.	0'5	N by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	27	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	S.E. by S.	0'2	S.E. by S.	0'2	E.S.E.	1'0	S.S.W.	1'0	—	0'0	—	0'0
	30	E by S.	0'5	E by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	31	W by N.	0'2	W by N.	0'2	W by N.	0'2	—	0'0	—	0'0	—	0'0

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .			6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.													
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.2	—	0.0	1
0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	E.S.E.	0.2	—	0.0	—	0.0	—	0.0	2
0.0	—	0.0	—	0.0	S.S.E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	3
0.2	S. by E.	0.2	—	0.0	—	0.0	S. by W.	0.2	S. by W.	0.2	E.	1.0	N. by W.	0.2	4
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	E.	0.0	—	0.0	—	0.0	6
0.2	S. by W.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	E.S.E.	0.2	E.	0.2	E.	0.2	—	0.0	7
0.2	S. by E.	0.2	E.S.E.	0.2	S.E. by E.	0.2	E.	0.2	E. by S.	0.2	E. by S.	0.2	—	0.0	8
0.2	E.S.E.	0.2	E. by N.	0.2	—	0.0	E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	—	0.0	9
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
0.2	S. by E.	0.2	S.	0.2	S.	0.2	S.	0.2	S.	0.2	S.	0.2	—	0.0	11
0.2	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	1.5	N. by W.	1.5	N. by W.	2.0	N. by W.	1.5	N.N.W.	1.0	12
0.2	S.E. by S.	0.2	S.S.E.	0.2	S.	0.2	S. by W.	0.2	S. by W.	0.2	S.S.W.	0.5	S.	0.2	13
0.0	S.	0.2	S.	0.2	S.	0.2	S.S.E.	0.5	S.	1.0	S.	0.5	S.	0.5	14
0.2	S. by W.	0.2	S.S.W.	1.5	S.S.W.	2.5	S.S.W.	1.5	S.W.	3.0	S.W.	0.2	S.S.W.	0.5	15
1.0	S.S.W.	1.5	—	—	—	—	—	—	—	—	—	—	—	0.0	16
0.2	—	0.2	S.	0.5	S.	1.0	S.S.W.	0.5	S.S.W.	0.2	S.W.	0.2	S.S.W.	0.2	17
0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	N.E.	0.5	18
0.2	S. by W.	0.2	S.	0.5	S.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W.	0.5	—	0.0	19
0.5	N.N.W.	0.5	N.N.W.	0.5	N.W.	1.5	N.W.	1.0	N.W.	0.5	W.N.W.	0.5	N.N.W.	1.0	20
0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	21
0.2	E.S.E.	0.2	E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.N.E.	0.2	22
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23
2.0	N.N.W.	1.5	N.	1.5	N.	1.0	N.	0.5	N.	1.0	N. by E.	1.5	N. by E.	1.0	24
0.2	S.E. by S.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	25
0.2	S.S.E.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by N.	0.2	E. by S.	0.2	E.S.E.	0.2	E. by S.	0.2	26
0.2	S.S.E.	0.2	S.E. by S.	0.2	E.S.E.	0.2	E.S.E.	0.2	S.E.	0.2	S.E.	0.2	S.E. by S.	0.2	27
0.2	—	0.0	S.E.	0.2	S.E.	0.2	S.E.	0.2	S.E. by S.	0.2	E.S.E.	0.2	S.E. by S.	0.5	28
0.2	S.S.E.	0.2	S. by E.	0.2	W.	0.2	S.W. by W.	0.2	S.W.	0.2	S.W.	0.2	W.	0.5	29
0.2	—	0.2	—	—	—	—	—	—	—	—	—	—	—	—	30
0.2	—	0.2	—	—	—	—	—	—	—	—	—	—	—	—	31

17 <sup>h</sup> .			18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.													
0.2	E.N.E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	—	0.0	1
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	4
0.0	—	0.0	—	0.0	—	0.0	N.W.	0.2	—	0.0	—	0.0	—	0.0	5
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	7
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	8
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
0.2	N.N.W.	0.2	N.N.W.	0.2	S.S.W.	0.2	N. by W.	0.2	N. by W.	0.2	N.W. by W.	0.2	N.W.	0.2	12
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	14
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
0.2	S.W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	18
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	23
0.0	—	0.0	—	0.0	—	0.0	W. by N.	0.2	N.N.W.	2.5	N.	3.0	N.	2.5	24
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	N. by E.	0.2	25
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	26
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	29
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30
0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	31

JULY.

JULY.



DIRECTION AND FORCE OF THE WIND.												
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
AUGUST.	1	—	—	—	—	—	—	—	—	—	—	—
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W. 0'2
	3	—	0'0	—	0'0	—	0'0	S.E. by S.	0'2	S.S.E.	0'2	S.S.E. 0'2
	4	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E. 0'2
	5	E. by S.	0'2	—	0'0	—	0'0	E. by S.	0'2	E. by S.	0'2	E. by S. 0'2
	6	—	0'0	—	0'0	N.N.E.	0'2	N.N.E.	0'2	E.	0'2	E.S.E. 0'2
	7	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	—	0'0	E.	0'2	E. 0'2
	8	—	—	—	—	—	—	—	—	—	—	—
	9	E.	0'5	E.	0'5	E. by N.	0'5	E. by N.	0'2	E.	0'2	E. by S. 0'2
	10	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E. 0'2
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	12	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	13	—	0'0	—	0'0	—	0'0	S.	0'2	S.S.E.	0'2	S.S.E. 0'2
	14	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S. 0'2
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	0'0	—	0'0	—	0'0	—	0'0	W.S.W.	0'2	S.S.W. 0'2
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	18	—	0'0	W.N.W.	0'2	N.W.	1'0	N.W.	1'0	W.N.W.	1'0	W.N.W. 1'0
	19	—	0'0	—	0'0	N.W.	0'2	W.N.W.	0'5	N.W. by W.	1'5	N.W. by W. 1'0
	20	W. by N.	0'2	W. by N.	0'2	W. by N.	0'2	W.S.W.	0'2	S.W. by W.	0'5	S.W. by W. 0'5
	21	N.W. by W.	0'2	W.N.W.	0'5	W.N.W.	0'2	W.N.W.	0'2	W. by N.	0'5	N.W. 2'0
	22	—	—	—	—	—	—	—	—	—	—	—
	23	N.N.W.	0'2	W. by N.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E. 0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E. 0'2
	26	—	0'0	—	0'0	—	0'0	E.	0'2	S.S.E.	0'2	S. by W. 0'5
	27	N.W.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'2	N.N.W.	0'5	N.N.W. 0'5
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	—	0'0	E.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	S. by W.	0'5	S.S.W. 1'0
	31	—	0'0	—	0'0	N.W. by N.	0'2	N.N.W.	0'5	N.N.W.	0'2	N.N.W. 0'2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
AUGUST.	1	—	—	—	—	—	—	—	—	—	—	—
	2	S.	0'2	S.	0'2	—	0'0	—	0'0	—	0'0	—
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	4	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	—	0'0	—	0'0	—
	5	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	E.N.E. 0'2
	6	N.	1'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. 0'2
	7	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	8	—	—	—	—	—	—	—	—	—	—	—
	9	E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	10	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	—	0'0	—
	11	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	12	S.S.W.	0'2	S.S.W.	0'2	—	0'0	—	0'0	—	0'0	—
	13	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	—	0'0	—	0'0	—
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	15	—	—	—	—	—	—	—	—	—	—	—
	16	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	17	—	0'0	—	0'0	—	0'0	N.W. by N.	1'5	N.N.W.	0'5	N.N.W. 0'2
	18	N.W. by W.	1'0	N.W. by W.	0'5	N.W. by W.	0'2	N.W. by W.	0'2	—	0'0	—
	19	W. by N.	1'0	W. by N.	0'2	—	0'0	—	0'0	W.	0'2	W. by N. 0'2
	20	W.N.W.	0'2	W. by N.	0'2	W.	0'2	N.W.	0'2	W. by N.	0'2	—
	21	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	22	—	—	—	—	—	—	—	—	—	—	—
	23	—	0'0	—	0'0	—	0'0	—	0'0	E.N.E.	0'2	E.N.E. 0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	26	S.S.W.	1'0	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W. 1'0
	27	S.S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	29	—	—	—	—	—	—	—	—	—	—	—
	30	W.N.W.	0'2	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—
	31	S.E. by S.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
—	—	—
0'0	S.W.	0'2
0'2	S.S.E.	0'2
0'2	S. by E.	0'2
0'2	E. by S.	0'2
0'2	E.S.E.	0'2
0'2	E.	0'2
—	—	—
0'2	E. by S.	0'2
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	S.S.E.	0'2
0'2	S.W. by S.	0'2
—	—	—
0'2	S.S.W.	0'2
0'0	—	0'0
1'0	W.N.W.	1'0
1'5	N.W. by W.	1'0
0'5	S.W. by W.	0'5
0'5	N.W.	2'0
—	—	—
0'2	E.S.E.	0'2
0'0	—	0'0
0'0	E.S.E.	0'2
0'2	S. by W.	0'5
0'5	N.N.W.	0'5
0'0	—	0'0
—	—	—
0'5	S.S.W.	1'0
0'2	N.N.W.	0'2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
—	—	—	—	—	—	—	—	—	—	—	—	1
S.W. by S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	S.	0'2	2
S.S.E.	0'2	S.S.E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.	0'2	3
S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	S.S.E.	0'2	4
E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	5
S.S.E.	0'2	—	0'0	S.S.E.	0'2	—	0'0	—	0'0	N.W.	0'2	6
S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	S.E.	0'2	—	0'0	7
—	—	—	—	—	—	—	—	—	—	—	—	8
E.	0'2	E. by N.	0'2	E.S.E.	0'2	E.	0'2	E.	0'2	E.	0'2	9
E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	—	0'0	—	0'0	S.E. by S.	0'2	10
—	0'0	—	0'0	—	0'0	W.N.W.	0'2	S.W.	0'2	—	0'0	11
—	0'0	S.S.E.	0'2	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	12
S.E.	0'2	E. by S.	0'2	S.E. by E.	0'5	E. by S.	0'5	E. by S.	0'5	E. by S.	0'2	13
—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	S. by E.	0'2	14
—	—	—	—	—	—	—	—	—	—	—	—	15
S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	—	0'0	16
S.S.W.	0'2	S.S.W.	2'0	S.W. by W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	17
N.W. by W.	1'0	N.W.	1'0	N.W.	2'0	N.W.	2'0	N.W.	3'0	N.W. by W.	2'0	18
N.W. by W.	1'0	W.N.W.	1'0	W. by S.	1'5	W.N.W.	1'5	W.N.W.	2'0	W. by N.	1'5	19
S.W.	2'0	W.	2'0	W.	2'0	N.W. by W.	2'0	N.W. by W.	0'2	N.W.	0'5	20
W.N.W.	2'0	N.W. by N.	1'5	N.N.W.	1'0	N.N.W.	1'0	W.N.W.	1'0	W.N.W.	0'5	21
—	—	—	—	—	—	—	—	—	—	—	—	22
E.S.E.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	—	0'0	23
—	0'0	—	0'0	—	0'0	S. by E.	0'2	S. by E.	0'2	—	0'0	24
E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'5	E. by S.	0'5	E. by S.	0'2	—	0'0	25
S. by E.	0'5	S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.	0'5	S.	1'0	26
N.	0'5	N.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
—	—	—	—	—	—	—	—	—	—	—	—	29
S. by W.	1'0	S. by W.	1'0	S. by W.	1'0	S.S.W.	1'0	S.W. by S.	1'0	W.N.W.	0'5	30
N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	S.E. by S.	0'2	31

AUGUST.

6 <sup>h</sup> .			17 <sup>h</sup> .		
Force.	Direction.	Force.	Force.	Direction.	Force.
lbs.		lbs.			
—	—	—	—	—	—
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'2	E.N.E.	0'2	—	—	0'2
0'2	N.	0'2	—	—	0'2
0'0	—	0'0	—	—	0'0
—	—	—	—	—	—
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'5	N.N.W.	0'2	—	—	0'0
0'0	—	0'0	—	—	0'0
0'2	W. by N.	0'2	—	—	0'0
0'2	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'2	E.N.E.	0'2	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0
0'2	S.S.W.	1'0	—	—	0'0
0'0	—	0'0	—	—	0'0
—	—	—	—	—	0'0
0'0	—	0'0	—	—	0'0
0'0	—	0'0	—	—	0'0

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	
—	—	—	—	—	—	—	—	—	—	—	—	1
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E. by S.	0'2	4
N.E. by E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'5	N.E.	0'2	N.N.E.	0'2	5
N.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	6
—	—	—	—	—	—	—	—	—	—	—	—	7
E.	0'5	E.	0'5	E.	1'0	E.	0'5	E. by N.	1'0	E. by N.	0'5	8
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	11
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	12
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
N.W. by N.	0'2	N.W.	0'2	N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'2	N.W.	0'2	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
W. by N.	0'2	W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	19
—	0'0	—	0'0	—	0'0	W. by N.	0'2	W. by N.	0'2	N.W. by W.	0'2	20
—	—	—	—	—	—	—	—	—	—	—	—	21
N.N.E.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	22
E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
W.S.W.	0'2	—	0'0	—	0'0	—	0'0	W.N.W.	0'5	N.W.	0'5	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	—	—	—	—	—	—	—	—	—	—	—	28
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	30
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	31

AUGUST.



5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0.2	S.S.E.	0.2
0.0	S. by E.	0.2
0.2	S.S.W.	0.2
0.5	E.	1.0
—	—	—
0.5	S. by W.	0.5
0.5	E.N.E.	1.0
0.5	S.	1.0
0.2	N.W.	0.2
0.2	S.S.E.	0.2
0.5	E.	0.5
—	—	—
1.5	N.W.	2.0
1.5	N.W. by N.	2.0
0.2	W.N.W.	0.2
0.2	S.S.E.	0.2
0.5	E.	0.5
0.5	E.N.E.	0.2
—	—	—
0.2	N. by E.	0.2
0.2	N.W. by N.	0.2
0.5	S.	0.5
0.2	S.S.W.	0.2
0.5	E. by N.	0.5
0.2	N.E. by E.	0.2
—	—	—
0.2	S. by E.	0.2
0.5	W. by N.	0.5
0.5	W.	0.5
0.5	W. by N.	0.5

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	1
S.S.E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	2
S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	3
S.S.W.	0.2	S.S.W.	0.5	S.S.W.	0.2	S.W. by S.	0.2	N.W. by W.	2.0	N.N.W.	2.0	4
E.	1.0	E.	0.5	E. by N.	0.5	E. by N.	0.5	E. by S.	0.5	E. by S.	1.0	5
—	—	—	—	—	—	—	—	—	—	—	—	6
S. by W.	0.2	S.	0.2	S.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	7
E. by N.	1.0	E.N.E.	1.0	N.E. by E.	1.0	E.N.E.	2.0	E.N.E.	1.0	E.N.E.	1.0	8
S. by E.	1.0	S.	1.0	S.	0.5	S.	0.5	S. by W.	0.2	S. by W.	2.0	9
W.S.W.	0.2	S.S.E.	0.5	S. by E.	0.5	S.	0.5	S. by W.	0.2	—	0.0	10
S.S.E.	0.2	S.S.E.	0.2	S.E. by S.	0.2	S.S.E.	0.2	—	0.0	—	0.0	11
E.	0.5	E.	0.5	E.	0.5	E.	0.5	E.	0.5	E.	0.5	12
—	—	—	—	—	—	—	—	—	—	—	—	13
N.W. by W.	1.5	W.N.W.	1.5	N.W. by W.	1.5	N.W.	1.0	N.W. by W.	2.0	N.W.	2.0	14
N.W.	1.5	N.W.	1.5	W.N.W.	1.5	W.N.W.	1.5	N.W.	1.5	N.W. by N.	1.0	15
W. by S.	0.5	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.5	—	0.0	16
S.	0.2	S.	0.2	S.	0.2	S. by E.	0.2	S. by E.	0.2	—	0.0	17
N.E. by E.	0.5	E.	0.5	E. by N.	0.5	E.N.E.	1.0	E.N.E.	1.0	E.N.E.	0.5	18
E.N.E.	0.2	E. by N.	0.2	N.E.	0.2	N.E. by E.	0.2	E.N.E.	1.0	E.N.E.	1.0	19
—	—	—	—	—	—	—	—	—	—	—	—	20
N.N.E.	0.2	N.E. by N.	0.2	N.N.E.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	N.E.	0.2	21
S.	0.5	N.N.W.	0.5	N.W. by W.	0.5	N.W. by W.	0.5	N.N.W.	0.5	N.N.W.	0.5	22
S. by W.	0.5	S. by W.	0.5	S. by W.	0.5	S. by W.	1.0	S.S.W.	0.5	—	0.0	23
S.W. by S.	0.2	S.S.W.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	S. by W.	0.2	24
E. by N.	0.5	E.S.E.	0.5	E.	0.5	E.S.E.	0.2	E.	0.2	E. by N.	0.2	25
E.N.E.	0.2	E. by S.	0.2	E. by N.	0.2	E.	0.2	E.	0.2	E. by N.	0.2	26
—	—	—	—	—	—	—	—	—	—	—	—	27
S.S.E.	0.2	N.E. by E.	0.2	S.S.W.	0.2	S.W.	0.2	S.W. by S.	0.2	—	0.0	28
N.W.	0.5	N.W. by W.	0.2	N.W. by N.	1.0	N.W. by N.	1.0	N.W. by W.	1.0	W.N.W.	1.0	29
W. by S.	0.5	S.W. by S.	1.0	N.W. by N.	1.0	W.	1.0	N.W. by W.	0.2	W.	0.2	30
W.S.W.	1.0	W.	0.5	S.W. by W.	0.5	W.N.W.	0.2	W.	0.2	W. by S.	0.2	

SEPTEMBER.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0.0	—	0.0
0.0	—	0.0
0.2	N.N.W.	0.2
0.5	E. by N.	0.2
—	—	—
0.0	—	0.0
0.0	—	0.0
1.5	N.N.W.	2.5
0.2	—	0.0
0.0	—	0.0
0.0	—	0.0
—	—	—
0.2	N.W. by W.	0.2
0.2	N.W.	0.5
0.2	N.N.W.	0.2
0.0	E. by N.	0.2
0.2	E.N.E.	1.0
0.2	E.N.E.	0.5
—	—	—
0.2	N.N.W.	0.2
0.2	N. by W.	0.2
0.0	—	0.0
0.0	—	0.0
0.2	N.E. by N.	0.2
0.2	E. by S.	0.2
—	—	—
1.5	W.N.W.	0.5
0.0	—	0.0
0.0	N.W. by W.	0.2
0.0	—	0.0

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	—	lbs.	1
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	2
N.N.W.	0.2	N.	0.2	N.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	3
—	—	—	—	—	—	—	—	—	—	—	—	4
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	5
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	6
—	0.0	—	0.0	E. by N.	0.2	—	0.0	—	0.0	E. by N.	0.2	7
N.N.W.	1.5	N.W. by W.	1.0	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by W.	0.2	8
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	9
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12
N.W.	0.2	N.W. by N.	0.5	N.W. by N.	0.5	N.W. by N.	0.5	N.W. by N.	0.5	N.W. by N.	0.2	13
—	0.0	N.W.	0.2	N.W.	0.2	—	0.0	—	0.0	—	0.0	14
N.N.W.	0.2	—	0.0	—	0.0	N.	0.2	N.	0.2	N.	0.2	15
E. by N.	0.2	E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	16
E.N.E.	2.0	E.N.E.	0.5	E.N.E.	1.0	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	1.0	17
—	—	—	—	—	—	—	—	—	—	—	—	18
E. by N.	0.5	E.	0.5	E. by N.	0.5	E. by N.	0.2	E. by N.	0.2	—	0.0	19
N.N.W.	0.2	N.N.W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.N.W.	0.5	N.N.W.	0.2	20
N.N.W.	0.2	N. by W.	0.2	N.N.W.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	21
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
E.	0.5	E.	0.2	E. by N.	0.5	E. by N.	1.0	N.E. by E.	1.0	N.E. by E.	1.0	23
—	0.0	—	0.0	—	0.0	N.E. by N.	0.5	N.E. by N.	0.5	N.N.E.	0.5	24
—	—	—	—	—	—	—	—	—	—	—	—	25
W.N.W.	1.0	E.S.E.	0.5	E.S.E.	0.5	E.S.E.	0.5	E. by S.	0.5	E. by S.	0.5	26
—	1.0	W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W. by S.	0.2	27
—	0.0	—	0.0	—	0.0	W.	0.2	—	0.0	W.N.W.	0.2	28
—	0.0	—	0.0	—	0.0	—	0.0	W.N.W.	0.2	—	0.0	29
—	0.0	S.W.	0.5	W.S.W.	0.5	W. by S.	1.0	W.N.W.	0.5	W.	0.5	30

SEPTEMBER.



5 <sup>h</sup> .	
Force.	Direction.
lbs. 1'0	W.N.W.
0'5	—
0'1	S. by E.
0'4	S.W. by S.
0'3	E. by N.
0'1	E.
0'2	N.
0'8	W.S.W.
0'0	N.N.W.
0'0	S.S.E.
0'0	N.W. by W.
0'3	N.N.W.
0'0	—
0'7	S. by E.
0'0	E. by S.
0'1	S.W. by W.
0'1	S. by W.
0'1	E.S.E.
0'4	N. by E.
0'1	W.N.W.
0'8	W. by S.
0'5	N.
0'3	N. by W.
0'1	S.W. by S.
0'1	S.W. by S.
0'0	—

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
N.W.	0'7	N.W. by W.	0'7	N.W.	0'5	N.W. by W.	0'3	N.W.	0'3	N.N.W.	0'2	1
—	0'0	N.N.W.	0'1	N. by W.	0'1	W.N.W.	0'1	S.	0'2	—	0'0	2
—	—	—	—	—	—	—	—	—	—	—	—	3
S.S.E.	0'1	E.S.E.	0'1	E.S.E.	0'1	E. by S.	0'2	E. by S.	0'1	E. by S.	0'1	4
S.W. by S.	0'2	S.S.W.	0'4	S.	0'5	S. by E.	0'2	S.S.E.	0'2	—	0'0	5
E. by N.	0'5	E.	0'4	E.N.E.	0'6	E. by N.	0'6	E. by N.	0'6	E. by N.	0'4	6
E.N.E.	0'2	E. by N.	0'2	E. by N.	0'4	E.	0'2	E. by N.	0'2	E.	0'3	7
N.	0'1	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.	0'1	8
W. by S.	0'1	S.W.	0'2	S.W. by S.	0'2	S.W.	0'4	S.S.W.	0'2	S.W. by S.	0'3	9
—	—	—	—	—	—	—	—	—	—	—	—	10
N.W.	0'8	W. by N.	0'3	W.N.W.	0'2	W.	0'2	W.N.W.	0'2	W. by S.	0'1	11
S.	0'4	S.S.W.	0'4	S.E.	0'2	S.E. by E.	0'1	S.E. by E.	0'1	E.S.E.	0'1	12
W.	0'8	W. by N.	0'0	W.S.W.	1'0	W. by S.	0'9	W.N.W.	0'6	W.N.W.	0'5	13
N.W.	0'1	N.W. by N.	0'4	N.W. by N.	0'4	N.N.W.	0'3	N.N.W.	0'3	N.W.	0'3	14
S.S.W.	0'1	S. by W.	0'1	—	0'0	S. by E.	0'1	—	0'0	—	0'0	15
S.E. by S.	0'6	S.E.	0'5	S.E.	0'4	S.E.	0'4	S.E. by E.	0'2	S.E. by E.	0'2	16
—	—	—	—	—	—	—	—	—	—	—	—	17
S.S.E.	0'2	S.E. by S.	0'2	S. by W.	0'6	S.S.W.	0'4	S.S.W.	0'3	S.W. by S.	0'2	18
W. by S.	0'2	W.	0'2	W.S.W.	0'3	W.S.W.	0'3	W. by S.	0'2	W. by N.	0'3	19
S.S.W.	0'5	S.S.W.	0'8	W. by S.	0'5	W.S.W.	0'5	W. by S.	0'5	W. by S.	0'2	20
N.E. by E.	0'1	E.N.E.	0'1	E.N.E.	0'2	N.E. by E.	0'4	E.N.E.	0'3	E.N.E.	0'3	21
N.	0'5	N.E.	0'2	N. by E.	0'2	N. by E.	0'1	—	0'0	N. by E.	0'1	22
S.S.W.	0'2	S.S.W.	0'5	S. by W.	0'4	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'1	23
—	—	—	—	—	—	—	—	—	—	—	—	24
N.W. by W.	1'0	W.	0'9	W. by N.	1'2	W. by N.	1'0	W.N.W.	1'1	N.W.	1'4	25
N.	0'3	N.	0'6	N.	1'0	N.N.W.	0'7	N. by E.	0'8	N.	0'7	26
—	0'0	—	0'0	S.S.W.	0'2	S.W. by S.	0'1	W.	0'2	W.	0'1	27
S.S.W.	0'5	S.S.W.	0'2	S.	0'3	S.	0'3	S. by E.	0'4	S. by E.	0'2	28
S. by W.	0'4	S.S.W.	0'5	S.	0'5	S. by E.	0'1	—	0'0	S.	0'1	29
S.W. by S.	0'1	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	30
—	—	—	—	—	—	—	—	—	—	—	—	31

OCTOBER.

16 <sup>h</sup> .		17 <sup>h</sup> .	
Force.	Direction.	Force.	Direction.
lbs. 0'0	N. by E.	0'1	—
0'0	N.	0'1	—
—	—	—	—
0'0	—	0'0	—
0'3	E. by N.	0'3	—
0'2	E.	0'4	—
0'4	E. by N.	0'2	—
0'6	N.N.W.	0'5	—
0'1	N.W. by W.	0'6	—
—	—	0'0	—
0'0	—	0'1	—
0'0	—	0'1	—
0'0	—	0'0	—
0'1	S. by E.	0'1	—
0'3	S.W. by S.	0'1	—
—	—	—	—
0'8	W.N.W.	0'3	—
0'0	—	0'0	—
0'1	N.	0'1	—
0'6	N.E. by N.	0'5	—
0'0	—	0'0	—
0'0	—	0'0	—
0'1	W.	0'1	—
0'1	N.	0'1	—
0'0	—	0'0	—
0'0	—	0'0	—
0'0	—	0'0	—
0'0	—	0'0	—
—	—	—	—

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
N. by E.	0'1	—	0'0	—	0'0	N.	0'1	N.	0'2	N.	0'1	1
—	0'0	—	0'0	—	0'0	N.E. by E.	0'1	—	0'0	—	0'0	2
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	3
E.N.E.	0'3	E. by N.	0'4	E. by N.	0'3	E. by N.	0'3	E. by S.	0'4	E. by N.	0'5	4
E. by S.	0'3	E.	0'3	E. by N.	0'2	E.	0'2	E. by N.	0'2	E. by N.	0'3	5
E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'3	E.N.E.	0'2	6
N.W. by N.	0'3	N.W. by N.	0'1	N.W.	0'1	—	0'0	—	0'0	—	0'0	7
—	—	—	—	—	—	—	—	—	—	—	—	8
W. by N.	0'1	W.N.W.	0'4	W.	0'2	W. by N.	0'3	W. by N.	0'3	W.N.W.	0'4	9
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	10
S.W. by W.	0'2	S.W. by W.	0'2	W.S.W.	0'3	W.S.W.	0'4	W. by S.	0'4	W.S.W.	0'2	11
—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'1	N.W. by N.	0'2	12
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
S. by E.	0'4	S. by W.	0'4	S.S.W.	0'6	S.S.W.	0'6	S.S.W.	0'6	S.S.W.	0'7	14
—	—	—	—	—	—	—	—	—	—	—	—	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.N.E.	0'1	16
W. by N.	0'1	W. by N.	0'1	W. by N.	0'1	W. by S.	0'1	W. by S.	0'1	—	0'0	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
N.E. by N.	0'6	N.E.	0'6	N.E. by N.	0'4	N.E. by N.	0'6	N.E.	0'3	N.E.	0'2	19
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	20
—	—	—	—	—	—	—	—	—	—	—	—	21
N.E.	0'1	N.E.	0'1	N. by E.	0'1	N.N.W.	0'2	N.N.W.	0'1	N.N.W.	0'1	22
W.	0'1	W. by N.	0'1	W. by N.	0'2	W. by N.	0'2	W. by N.	0'1	—	0'0	23
N.	0'1	N.	0'1	N.	0'2	N.	0'2	N.	0'2	N.	0'2	24
—	0'0	—	0'0	—	0'0	W. by N.	0'1	—	0'0	—	0'0	25
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	30
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	31

OCTOBER.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
NOVEMBER.	1	—	0'0	—	0'0	—	0'0	S.W.	0'2	—	0'0	—	0'0
	2	—	0'0	—	0'0	E. by N.	0'2	—	0'0	—	0'0	—	0'0
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S.W.	0'2
	4	W.S.W.	0'2	—	0'0	—	0'0	W.	0'2	W.N.W.	0'2	S.W. by S.	0'2
	5	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.	0'2	W.S.W.	0'2	N.W. by W.	0'2
	6	N. by W.	0'2	—	0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N.	0'2
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	0'0	N.E.	0'2	E. by N.	0'2	N.E. by N.	0'2	E.N.E.	0'2	—	0'0
	9	—	0'0	S. by W.	0'2	S.W. by W.	0'2	S.S.W.	0'2	S.W.	0'2	N.W.	1'5
	10	W. by S.	0'5	W. by S.	0'5	W.S.W.	0'5	W.S.W.	0'5	W.S.W.	0'5	W.N.W.	1'0
	11	W. by N.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W.	0'2
	12	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	1'0
	13	W.N.W.	0'2	W.N.W.	0'2	N.W.	0'2	N.W.	0'2	N.	0'2	N.	0'5
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	W.	0'2	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	N.W.	1'0	N.W. by W.	1'5
	16	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	S.S.E.	0'2
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18	E.	0'5	E.N.E.	0'5	E.N.E.	0'5	E.N.E.	0'2	E.N.E.	0'2	E. by N.	0'2
	19	N.W. by W.	1'5	N.N.W.	1'0	N.N.W.	0'5	N.W.	1'5	N.W.	1'5	N.W. by N.	1'5
	20	—	0'0	—	0'0	N. by E.	0'2	N.E. by E.	0'2	N.N.E.	0'2	E. by N.	0'2
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.	0'2
	23	E.N.E.	0'5	E.	0'5	E. by N.	0'5	E.N.E.	0'5	E.N.E.	0'2	E. by S.	0'2
	24	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	25	—	0'0	—	0'0	—	0'0	—	0'0	S. by W.	0'2	W.	0'2
	26	N.W. by N.	2'0	N.N.W.	1'0	N. by W.	1'0	W.N.W.	1'5	W.N.W.	0'5	N.W.	0'5
	27	W. by S.	0'5	S.W. by S.	0'2	S.W.	0'2	S.W. by W.	0'2	W.S.W.	1'0	S.W. by W.	0'5
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.	0'2	N.W. by N.	0'2	N.N.W.	0'2
	30	S.S.E.	0'5	E.S.E.	0'2	E.S.E.	0'2	—	0'0	S.E. by E.	0'2	S.E. by E.	0'2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
NOVEMBER.	1	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	5	N.W. by W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	W.	0'2	W.N.W.	0'2	N.W. by N.	1'0
	6	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	7	—	—	—	—	—	—	—	—	—	—	—	
	8	—	0'0	E.N.E.	0'2	—	0'0	E. by S.	0'2	E.	0'2	E.	0'2
	9	W.S.W.	0'2	—	0'0	—	0'0	W.S.W.	1'0	W.S.W.	1'0	W.S.W.	1'0
	10	W.	0'2	W.	0'5	W.	0'2	W.	0'2	W.S.W.	0'2	—	0'0
	11	W.	0'2	W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2
	12	S.W. by W.	1'0	W. by S.	0'2	W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2
	13	E.S.E.	0'5	E.S.E.	1'5	E. by S.	2'5	E. by S.	2'5	E. by S.	3'0	E. by S.	3'0
	14	—	—	—	—	—	—	—	—	—	—	—	
	15	W.N.W.	1'0	N.N.W.	1'0	W.N.W.	1'0	N.W.	0'2	W. by N.	0'2	W. by N.	0'2
	16	S.W.	1'0	S.W.	0'5	S.W. by W.	0'5	—	0'0	—	0'0	W.S.W.	0'2
	17	—	0'0	S.E. by E.	0'2	N.E. by E.	0'2	—	0'0	—	0'0	—	0'0
	18	N.N.E.	0'2	—	0'0	E.S.E.	0'2	W.S.W.	0'5	W.	2'0	W.S.W.	1'5
	19	N.N.W.	1'5	N.W. by N.	1'5	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'5	N.E.	0'2
	20	E.S.E.	0'2	S.E. by E.	0'2	S.E.	0'2	S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2
	21	—	—	—	—	—	—	—	—	—	—	—	
	22	—	0'0	—	0'0	—	0'0	N.E. by E.	0'2	E.N.E.	0'5	E.N.E.	1'0
	23	S. by W.	0'2	S. by W.	0'2	E.N.E.	0'2	E. by N.	0'2	E.N.E.	0'2	E. by S.	0'2
	24	N. by E.	0'2	N.	0'2	N.N.W.	0'2	N. by W.	0'5	N.N.W.	0'5	N.N.W.	0'5
	25	W.S.W.	0'5	W.S.W.	1'0	W. by S.	1'0	W.N.W.	0'5	N.W. by N.	0'5	N.N.W.	0'5
	26	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	27	S.W.	1'5	S.W.	1'5	S.W.	1'5	S.W.	1'5	S.W.	1'5	W.S.W.	1'0
	28	—	—	—	—	—	—	—	—	—	—	—	
	29	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	30	—	0'0	—	0'0	S.E.	0'2	S.E. by S.	0'2	S. by E.	0'2	S. by W.	0'5

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.	—	lbs.
0'0	—	0'0
0'0	—	0'0
0'0	S.W.	0'2
0'2	S.W. by S.	0'2
0'2	N.W. by W.	0'2
0'2	N.	0'2
—	—	—
0'2	—	0'0
0'2	N.W.	1'5
0'5	W.N.W.	1'0
0'2	W.	0'2
0'2	W.S.W.	1'0
0'2	N.	0'5
—	—	—
1'0	N.W. by W.	1'5
0'2	S.S.E.	0'2
0'0	—	0'0
0'2	E. by N.	0'2
1'5	N.W. by N.	1'5
0'2	E. by N.	0'2
0'0	N. by W.	0'2
0'2	E. by S.	0'2
0'0	—	0'0
0'2	W.	0'2
0'5	N.W.	0'5
1'0	S.W. by W.	0'5
—	—	—
0'2	N.N.W.	0'2
0'2	S.E. by E.	0'2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2	—	0'0	
—	0'0	—	0'0	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	
S.W. by S.	0'2	S.S.W.	0'2	S.W. by W.	0'2	—	0'0	S.W.	0'2	—	0'0	
S.S.W.	0'2	S.	0'2	S.S.W.	0'2	S. by W.	0'2	S.	0'2	—	0'0	
W. by S.	1'0	N.W. by W.	1'5	N.W.	1'0	N.W. by W.	1'0	W.N.W.	2'0	N.W. by W.	1'5	
N.	0'2	—	0'0	N.W.	0'2	—	0'0	N.E. by E.	0'2	S.S.E.	0'2	
—	—	—	—	—	—	—	—	—	—	—	—	
N.E. by N.	0'2	E. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	
N.W.	1'5	W.N.W.	1'0	W.N.W.	0'5	W.S.W.	0'2	W. by S.	0'2	W.S.W.	0'2	
W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	W.N.W.	0'2	W.	0'2	W.	0'5	
W. by S.	0'2	W.N.W.	0'2	W. by N.	0'2	W.	0'2	W.	0'2	W.	0'2	
W.S.W.	1'0	W. by S.	1'0	W. by S.	1'5	W.S.W.	1'5	W.S.W.	1'0	S.W. by W.	1'5	
N. by W.	0'2	—	0'0	S.E. by S.	0'2	E.S.E.	0'2	—	0'0	S.E. by E.	0'2	
—	—	—	—	—	—	—	—	—	—	—	—	
N.W.	1'5	N.W. by N.	1'5	N.W. by N.	1'5	N.W. by N.	1'0	N.W. by N.	1'5	N.W. by N.	1'0	
S.E. by S.	0'2	S.E. by S.	0'2	S.	0'2	S.S.W.	0'5	S.W.	1'0	S.W.	1'0	
W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
E. by N.	0'2	E.N.E.	0'2	E.	0'2	E. by N.	0'5	—	0'0	N.N.W.	0'2	
N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'5	N. by W.	1'5	
E. by S.	0'2	E. by N.	0'2	E.S.E.	0'2	S.E.	0'2	E.	0'2	E. by S.	0'2	
—	—	—	—	—	—	—	—	—	—	—	—	
—	0'0	—	0'0	E.S.E.	0'2	E.	0'2	—	0'0	—	0'0	
E.	0'2	E.N.E.	0'2	—	0'0	S.E. by S.	0'2	S.S.E.	0'2	S. by W.	0'2	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
W.	0'2	S.W. by W.	0'2	S.W.	0'5	S.W. by W.	0'5	S.W. by W.	0'5	W.S.W.	0'5	
N.W. by W.	1'0	W.N.W.	1'0	W.N.W.	1'0	N.W. by W.	0'5	N.W. by W.	0'5	N.W.	0'2	
W.S.W.	0'5	W.S.W.	1'0	W. by S.	1'5	W.S.W.	1'0	S.W.	1'0	S.W.	1'5	
—	—	—	—	—	—	—	—	—	—	—	—	
N.N.W.	0'2	N.	0'2	—	0'0	S.S.E.	0'2	S. by E.	0'2	—	0'0	
E.	0'2	E.	0'2	S.E. by E.	0'5	E.S.E.	0'2	S.E.	0'2	E.S.E.	0'2	

NOVEMBER.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.	—	lbs.
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	N.W. by W.	1'0
0'2	N.W. by N.	0'2
0'0	—	0'0
—	—	—
0'2	E.	0'2
1'0	W.S.W.	1'0
0'2	—	0'0
0'2	W.S.W.	0'2
0'2	W. by S.	0'2
3'0	E. by S.	3'0
—	—	—
0'2	W. by N.	0'2
0'0	W.S.W.	0'2
0'0	—	0'0
2'0	W.S.W.	1'5
0'5	N.E.	0'2
0'2	E.S.E.	0'2
—	—	—
0'5	E.N.E.	1'0
0'2	E. by S.	0'2
0'5	N.N.W.	0'5
0'5	N.N.W.	0'5
0'0	—	0'0
1'5	W.S.W.	1'0
—	—	—
0'0	—	0'0
0'2	S. by W.	0'5

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
N.W. by N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
N.W.	1'0	N.W. by W.	0'5	—	0'0	—	0'0	—	0'0	W. by S.	0'2	
N.W.	0'2	N.W.	0'2	N.W. by N.	0'2	N.W. by N.	0'2	N. by W.	0'2	N.W. by N.	0'2	
—	—	—	—	—	—	—	—	—	—	—	—	
E.S.E.	0'2	E. by S.	0'2	E. by S.	0'2	—	0'2	E. by N.	0'2	—	0'0	
E.N.E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
W.S.W.	1'0	W. by S.	2'0	W.S.W.	1'5	W.S.W.	1'0	W.S.W.	0'5	W. by S.	0'5	
S.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by N.	0'2	W. by N.	0'2	
W.S.W.	0'2	W.S.W.	0'2	W. by S.	0'2	W. by S.	0'2	W.S.W.	0'2	W.S.W.	0'2	
W.	0'2	W.N.W.	0'2	N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	
—	—	—	—	—	—	—	—	—	—	—	—	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
S.W. by W.	0'2	S.W. by W.	0'2	W.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	—	0'0	
—	0'0	E.S.E.	0'2	N.E. by E.	0'2	E. by N.	0'2	E.	0'5	E.	0'5	
W.S.W.	1'5	W. by S.	1'5	W. by S.	1'5	W.N.W.	1'5	N.W. by W.	1'5	N.N.W.	1'5	
N. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
—	—	—	—	—	—	—	—	—	—	—	—	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	
E.N.E.	1'0	E. by N.	1'0	E. by N.	1'0	E. by N.	0'5	E.N.E.	0'5	E.N.E.	0'2	
S.E. by S.	0'2	E. by S.	0'2	—	0'0	—	0'0	S.W.	0'2	—	0'0	
N.W. by W.	0'5	N.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	—	0'0	
N.N.W.	1'5	N.W.	1'0	N.W.	1'0	N.W.	1'0	N.W.	1'0	N.N.W.	2'0	
—	0'0	—	0'0	E. by S.	0'2	W. by S.	0'2	W.S.W.	0'5	W.S.W.	0'5	
—	—	—	—	—	—	—	—	—	—	—	—	
N.N.W.	1'5	N.N.W.	1'5	N.N.W.	1'0	N.N.W.	0'5	N.N.W.	0'5	N.W. by N.	0'2	
—	0'0	S.E.	0'2	S.E.	0'5	S.E.	0'5	S.E. by S.	0'5	S.S.E.	0'5	
S. by W.	0'5	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	S.	0'2	

NOVEMBER.



DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
DECEMBER.	1	S.	0.5	S.	0.5	S. by W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5
	2	—	0.0	—	0.0	—	0.0	N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	3	N. by W.	0.2	—	0.0	N. by W.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	4	N.W. by W.	0.5	W.N.W.	0.5	—	0.0	S. by W.	0.2	E. by N.	0.2	S.S.E.	0.2
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	0.0	—	0.0	—	0.0	—	0.0	S.W.	0.2	W.S.W.	0.2
	7	S.S.W.	0.5	S.S.W.	0.2	—	0.0	S.W. by S.	0.2	S.S.W.	0.2	S.W. by S.	0.2
	8	E.S.E.	0.2	S.	0.2	S. by E.	0.2	S. by W.	0.2	S. by W.	0.2	S.	0.2
	9	E.N.E.	0.2	—	0.0	—	0.0	N.E. by E.	0.2	—	0.0	E. by N.	0.2
	10	S.W. by W.	0.2	S.W.	0.2	S.W.	0.2	—	0.0	—	0.0	—	0.0
	11	—	0.0	—	0.0	E. by S.	0.2	W.	0.2	W.S.W.	0.2	W. by S.	0.2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	—	0.0	W.N.W.	0.2	W.N.W.	0.2	—	0.0	—	0.0	—	0.0
	14	N.N.E.	0.2	N.E. by N.	0.2	N.E. by N.	0.2	N. by E.	0.2	N.E.	0.2	N. by E.	0.2
	15	N.	0.2	N. by N.	0.5	N. by W.	1.0	N. by E.	0.5	N.E.	0.5	N.E.	0.2
	16	N. by E.	1.0	S.	0.5	N.N.E.	0.5	N.	0.2	N.N.E.	0.5	N.N.E.	0.5
	17	N.E.	0.2	—	0.0	—	0.0	N.	0.5	N.	1.5	N.	2.5
	18	—	0.0	—	0.0	—	0.0	N.W. by W.	0.2	N.E. by N.	0.2	S.W. by W.	0.2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	N.N.W.	0.5	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N.N.W.	0.5
	21	—	0.0	N.W. by W.	0.2	N.W. by W.	0.2	—	0.0	—	0.0	—	0.0
	22	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	—	0.0	—	0.0	—	0.0
	23	S.W. by S.	0.2	S.W.	0.5	S.W.	0.5	S.W.	0.2	S.W.	1.0	S.W.	0.5
	24	W. by N.	0.5	W. by S.	0.5	W.S.W.	0.5	W. by S.	0.5	N.W.	0.2	N.W. by W.	1.0
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	W.	0.2	W.	0.2	W.	0.2	W.	0.2	W.	0.2	W.	0.0
	28	S.W.	1.5	S.W. by W.	1.5	S.W.	0.5	S.W.	0.5	S.W.	2.0	S.W. by S.	1.5
	29	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	30	S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W. by S.	0.2	S.W. by S.	0.2	S.W. by S.	0.5
	31	—	0.0	N.E.	0.2	—	0.0	—	0.0	E.	0.2	E. by N.	0.2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
		lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	
DECEMBER.	1	—	0.0	—	0.0	—	0.0	E.	0.2	—	0.0	—	0.0
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	3	N.W.	1.0	N.W.	1.0	N.N.W.	0.5	N.W. by N.	0.5	N.W.	0.5	N.W.	0.5
	4	S.S.W.	1.0	S. by W.	1.5	S.	1.5	S.	1.5	S. by W.	1.5	S.W. by S.	1.5
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	—	0.0	S. by E.	0.2	S.W. by W.	0.2	—	0.0	S. by W.	0.2	S.	0.2
	7	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	8	S.W. by W.	0.5	S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W. by W.	0.2	—	0.0
	9	—	0.0	—	0.0	—	0.0	S. by E.	0.2	—	0.0	S.W. by W.	0.2
	10	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	11	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	E.N.E.	0.2
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2	N.	0.2	N. by E.	0.2
	14	N.N.E.	0.2	N.	0.2	N.	0.2	N. by E.	0.2	N.N.W.	0.2	N.	0.2
	15	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.5	N.E. by N.	1.0	N.E. by N.	1.0
	16	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	17	N. by W.	0.2	N. by W.	0.2	N.	0.5	N. by E.	0.2	—	0.0	—	0.0
	18	S.W.	1.5	S.W. by W.	1.0	S.W. by W.	1.5	S.W.	0.5	S.W. by W.	0.2	S.W. by W.	0.2
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	N. by W.	0.5	N.	0.2	—	0.0	—	0.0	—	0.0	N.	0.2
	21	S.W.	2.0	S.W.	1.5	S.W.	2.0	S.W. by S.	2.5	S.S.W.	2.5	S.W.	2.5
	22	N.W.	1.5	N.W.	1.5	N.W.	1.0	W.	0.5	W.	0.5	W. by N.	0.2
	23	S.W. by W.	0.5	S.W. by W.	0.5	S.W. by W.	0.5	W.S.W.	0.5	S.W. by W.	1.0	W.S.W.	1.0
	24	N.W.	0.2	N.W.	0.2	W.N.W.	0.2	W. by N.	0.2	W.N.W.	0.2	W.N.W.	0.2
	25 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	S.	1.0	S.	1.0	S.	1.0	S.	1.0	S.	1.0	S.	0.5
	28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	29	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	—	0.0
	30	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	31	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0

<sup>a</sup> Christmas Day.

5 <sup>h</sup> .		
Force.	Direction.	Force.
0.5	S.S.W.	0.5
0.2	N.N.W.	0.2
0.2	N.N.W.	0.2
0.2	S.S.E.	0.2
—	—	—
0.2	W.S.W.	0.2
0.2	S.W. by S.	0.2
0.2	S.	0.2
0.0	E. by N.	0.2
0.0	—	0.0
0.2	W. by S.	0.2
—	—	—
0.0	—	0.0
0.2	N. by E.	0.2
0.5	N.E.	0.2
0.5	N.N.E.	0.5
1.5	N.	2.5
0.2	S.W. by W.	0.2
—	—	—
0.5	N.N.W.	0.5
0.0	—	0.0
0.0	—	0.0
1.0	S.W.	0.5
0.2	N.W. by W.	1.0
—	—	—
—	—	—
0.2	—	0.0
2.0	S.W. by S.	1.5
0.2	S.S.W.	0.2
0.2	S.W. by S.	0.5
0.2	E. by N.	0.2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
S.S.W.	0.5	S.S.W.	0.5	S.	0.5	S. by W.	0.2	S.W.	0.2	—	0.0	1
N.W. by N.	0.2	N.N.W.	0.2	N.W. by N.	0.2	N.N.W.	0.2	—	0.0	—	0.0	2
N. by W.	0.5	N. by W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.W.	1.0	3
S.	0.2	S. by E.	0.2	S.S.E.	0.2	S.	0.2	S.S.W.	0.5	S.S.W.	0.5	4
—	—	—	—	—	—	—	—	—	—	—	—	5
W.S.W.	0.2	W. by S.	0.2	S. by W.	0.2	—	0.0	—	0.0	—	0.0	6
S.S.W.	0.2	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	—	0.0	7
S.S.W.	0.5	S.S.W.	0.5	S.W. by S.	0.5	S.W. by S.	1.0	S.W.	1.0	S.W.	0.5	8
E. by N.	0.2	E.N.E.	0.2	N.E. by E.	0.2	E.	0.2	E. by N.	0.2	—	0.0	9
S.W. by W.	0.2	S.W.	0.5	S.W.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	10
W.	1.0	W. by N.	1.0	W. by S.	0.5	W. by S.	0.5	W. by S.	0.5	—	0.0	11
—	—	—	—	—	—	—	—	—	—	—	—	12
—	0.0	N.E. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	13
N. by E.	0.2	N.	0.2	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.2	14
N. by E.	0.2	N.	0.2	N.	0.2	N.	0.2	N. by E.	0.5	N. by E.	0.2	15
N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.	0.2	N.N.E.	0.2	—	0.0	16
N.	1.5	N.	1.5	N.	0.5	—	0.0	—	0.0	—	0.0	17
S.W. by W.	0.2	S.W. by S.	0.5	S.W. by S.	0.5	S.W. by S.	0.5	S.W.	0.5	S.W.	0.5	18
—	—	—	—	—	—	—	—	—	—	—	—	19
N.	0.2	N.N.W.	1.0	N.	1.0	N.N.W.	1.0	N.W.	1.0	N. by W.	1.0	20
S.W. by W.	0.5	S.W. by W.	0.5	S.W. by W.	1.5	S.W. by S.	1.5	S.W. by S.	1.0	S.W.	1.5	21
—	0.0	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	1.5	22
S.W. by S.	4.5	S.W.	2.0	S.W.	2.0	S.W. by W.	1.0	W. by S.	0.5	S.W. by W.	0.5	23
N.W.	1.0	N.W. by W.	0.5	N.W.	0.2	N.W.	0.2	N.W.	0.2	N.W.	0.2	24
—	—	—	—	—	—	—	—	—	—	—	—	25 <sup>a</sup>
—	—	—	—	—	—	—	—	—	—	—	—	26
W.	0.2	S.W. by W.	0.5	S.W. by W.	0.2	S.S.W.	0.5	S.S.W.	1.0	S.	1.0	27
S.W.	2.5	S.W.	2.0	S.W.	1.0	S.W.	1.0	S.W.	1.0	S.W.	0.2	28
S.W.	1.5	S.S.W.	0.5	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.5	S.S.W.	0.2	29
S.W. by S.	1.0	S.W. by S.	0.5	S.S.W.	0.5	S.W. by S.	0.2	S.W. by S.	0.2	—	0.0	30
E. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	31

DECEMBER.

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1
—	0.0	—	0.0	—	0.0	—	0.0	N. by W.	0.2	N. by W.	0.2	2
N.N.W.	0.5	N.N.W.	0.5	N.W. by N.	0.5	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	3
—	—	—	—	—	—	—	—	—	—	—	—	4
W.N.W.	0.2	W.N.W.	0.2	W.N.W.	0.2	N.W. by W.	0.2	N.W. by W.	0.2	N.W. by N.	0.2	5
S. by W.	0.5	S.	0.5	S.	0.5	S. by W.	0.5	S. by W.	0.5	S.S.W.	0.5	6
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	7
—	0.0	W. by N.	0.2	N.W.	0.2	—	0.0	—	0.0	N.N.E.	0.2	8
—	0.0	—	0.0	—	0.0	—	0.0	S.W.	0.2	—	0.0	9
—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	—	0.0	10
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	11
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	12
N.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N. by E.	0.2	N.N.E.	0.2	13
N. by W.	0.2	N.W. by N.	0.2	N. by W.	0.2	N.	0.2	—	0.0	—	0.0	14
N.E. by N.	1.0	N. by E.	0.5	N. by E.	1.0	N. by E.	1.0	N. by E.	0.5	N. by E.	0.5	15
—	0.0	N. by E.	0.2	N. by W.	0.2	N. by W.	0.2	N.N.E.	0.5	N.E. by N.	0.2	16
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	17
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	18
—	0.0	—	0.0	N. by W.	0.2	N. by W.	0.2	N.N.W.	0.5	N.W. by N.	0.5	19
—	0.0	N.E. by N.	0.2	N.N.E.	0.2	N.N.E.	0.2	N. by E.	0.2	—	0.0	20
S.W. by S.	2.0	S.W. by S.	1.5	W.S.W.	1.0	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	21
W. by N.	0.5	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W.S.W.	0.2	22
W.S.W.	0.5	W.S.W.	0.2	W. by N.	0.2	W. by N.	1.5	W. by N.	1.0	W. by N.	1.0	23
—	—	—	—	—	—	—	—	—	—	—	—	24
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	25 <sup>a</sup>
—	0.0	—	0.0	—	0.0	W.	0.2	W.	0.2	W.	0.2	26
S.W.	0.5	S.W.	2.0	S.W.	1.5	S.W. by W.	1.5	S.W.	1.5	S.W.	1.5	27
—	0.0	S.W. by W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	28
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	29
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	31

DECEMBER.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JANUARY.	1	—	lbs.	S.E. by E.	lbs.	E.S.E.	lbs.	S.E. by E.	lbs.	—	lbs.	—	
	2	—	0'0	—	0'2	—	—	—	—	—	—	—	
	3	S.W. by S.	0'5	S.W.	0'5	S.W.	1'0	S.W. by S.	1'5	S.W. by S.	1'0	S.W. by S.	0'5
	4	N.W.	1'0	W.N.W.	1'0	N.W.	0'5	N.W.	0'5	N.N.W.	1'5	N.W.	1'0
	5	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	6	N.W. by N.	0'5	N.W. by N.	0'5	N.W. by N.	0'2	N.W. by W.	0'2	N.W. by W.	0'2	N.W. by W.	0'2
	7	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	8	S. by W.	0'5	S. by W.	0'5	S.W. by S.	0'5	S.W.	0'2	S.W.	0'2	N.E.	0'2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	N.	0'2	N.	0'2	N. by E.	0'2	N.	0'2	N.	0'2	N.	0'2
	11	S.W.	0'2	S.W.	0'2	S.S.W.	2'5	S. by W.	3'0	S.S.W.	2'5	S.S.W.	2'0
	12	N.W.	0'2	—	0'0	—	—	—	—	—	—	—	—
	13	S.E. by S.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2
	14	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	15	E. by N.	0'2	—	0'0	—	—	—	—	—	—	—	—
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	N.W.	1'0	N.W.	2'0	N.W.	2'0	N.W. by W.	1'5	N.W. by W.	1'5	N.W. by W.	1'0
	18	W. by S.	1'0	W. by N.	2'0	W. by N.	5'0	W. by N.	2'5	N.W. by N.	3'5	N.W.	3'0
	19	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	20	S.W. by S.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'5	S. by W.	0'5	S. by W.	0'5
	21	S.W.	1'5	S.W.	1'5	S.W. by W.	0'2	W.S.W.	0'5	W.S.W.	1'0	W.	1'5
	22	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	—	—	—	—	E.S.E.	0'2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	E.N.E.	0'2	N.E.	0'2	E. by N.	0'5	E. by N.	0'2	E.	0'2	E.	0'2
	25	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	26	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2
	27	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	28	W. by S.	1'0	W.S.W.	0'2	W.S.W.	0'2	S.W.	0'5	S.W.	0'5	S.S.W.	0'5
	29	—	0'0	N.W.	0'2	N.W. by N.	0'5	N.W. by N.	0'2	N.W.	0'5	N.W. by N.	1'0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	E.	2'0	E.N.E.	0'5	E.	0'5	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JANUARY.	1	N.N.W.	lbs.	N.N.W.	lbs.	N.N.W.	lbs.	N.N.W.	lbs.	N.N.W.	lbs.	N.N.W.	
	2	—	2'5	—	2'0	—	—	—	—	—	—	—	
	3	S.S.W.	0'2	S.W.	1'0	S.W. by W.	0'5	S.W. by W.	0'5	S.W. by W.	0'5	W.S.W.	0'2
	4	N. by W.	0'5	N.	0'5	N.	0'2	N. by E.	0'2	N. by E.	0'5	N.N.E.	0'2
	5	W. by N.	5'5	W. by S.	4'0	W. by N.	3'0	N.W. by N.	4'0	N.W. by N.	2'5	N.W. by N.	1'5
	6	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	7	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	1'0	S.E. by S.	1'5	S. by E.	1'5	S. by E.	1'0
	8	N.W. by W.	0'5	N.N.W.	0'2	N.	0'2	N.	0'2	N. by W.	0'5	N. by W.	0'5
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	11	W.S.W.	0'2	W.S.W.	0'5	W.S.W.	0'5	W.S.W.	0'2	W.S.W.	0'5	W.S.W.	0'2
	12	—	0'0	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2
	13	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	14	E. by N.	0'2	E. by N.	0'2	—	—	—	—	—	—	—	—
	15	N.W. by W.	1'5	N.W. by W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	S.S.W.	0'2	S.W. by W.	0'2	S.W. by W.	0'2	S. by W.	0'2	S.W.	0'2	S.S.W.	0'2
	18	W.N.W.	1'5	N.W.	1'5	N.W.	1'5	N.W.	1'0	N.W.	1'0	N.W.	1'5
	19	S.S.E.	0'2	S.	1'0	S.	1'0	S. by E.	1'0	S. by E.	1'0	S.	0'5
	20	S.S.W.	0'2	—	0'0	—	—	—	—	—	—	—	—
	21	N.W. by N.	2'0	N.W. by N.	2'0	N.W. by N.	2'0	N.W.	1'5	N.W.	1'5	N.W.	1'5
	22	E. by N.	0'5	E.N.E.	0'5	E.N.E.	0'5	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by N.	0'2
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	25	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	26	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	27	—	0'0	—	0'0	—	—	—	—	—	—	—	—
	28	—	0'0	—	0'0	S.	0'2	W. by N.	1'0	W. by N.	2'0	W.N.W.	2'5
	29	W.N.W.	0'2	W.N.W.	0'2	W.N.W.	0'2	—	0'0	W.N.W.	0'2	—	0'0
	30	—	—	—	—	—	—	—	—	—	—	—	—
	31	W.S.W.	2'0	W.S.W.	2'0	W.S.W.	1'5	W.S.W.	2'0	W.S.W.	2'0	W.S.W.	1'0

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 0'0	—	lbs. 0'0
—	—	—
1'0	S.W. by S.	0'5
1'5	N.W.	1'0
1'0	S.E. by S.	1'0
0'2	N.W. by W.	0'2
0'2	N.E.	0'2
—	—	—
—	—	—
0'2	N.	0'2
2'5	S.S.W.	2'0
0'0	—	0'0
0'0	S.S.E.	0'2
0'0	S.E. by E.	0'2
0'0	S. by E.	0'2
—	—	—
1'5	N.W. by W.	1'0
3'5	N.W.	3'0
0'0	—	0'0
0'5	S. by W.	0'5
1'0	W.	1'5
0'0	E.S.E.	0'2
—	—	—
0'2	E.	0'2
0'0	—	0'0
0'2	E. by N.	0'2
0'0	—	0'0
0'5	S.S.W.	0'5
0'5	N.W. by N.	1'0
—	—	—
0'2	E. by S.	0'2

DIRECTION AND FORCE OF THE WIND.												Mean Güttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	lbs. 0'0	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	W.S.W.	0'2	W.S.W.	0'2	1
S.W. by S.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W.	0'5	2
N.W.	2'0	N.W. by N.	2'0	N.N.W.	2'0	N. by W.	1'0	N. by W.	1'0	N.	0'5	3
S.S.E.	0'5	S.S.W.	0'5	S.W. by W.	0'5	W.S.W.	0'5	W. by N.	2'0	W. by N.	6'0	4
N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5
N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0	6
—	0'0	—	0'0	S.W.	0'2	N.W.	0'5	N.W.	0'2	N.W. by W.	0'5	7
—	—	—	—	—	—	—	—	—	—	—	—	8
N.	0'2	N.N.W.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	9
S.W.	2'0	S.W.	1'5	S.W.	1'5	S.W. by W.	1'0	W.S.W.	0'5	W.S.W.	0'2	10
—	0'0	N.E.	0'2	E. by N.	0'2	S.E.	0'2	—	0'0	—	0'0	11
S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.S.E.	0'2	—	0'0	12
S.E. by E.	0'2	—	0'0	—	0'0	S.E.	0'2	S.S.E.	0'2	—	0'0	13
S.	0'2	S. by W.	0'2	—	0'0	—	0'0	W. by N.	0'2	N.W. by W.	1'5	14
—	—	—	—	—	—	—	—	—	—	—	—	15
N.W. by N.	0'5	W.N.W.	0'2	—	0'0	N.W. by W.	0'2	S.S.W.	0'2	S. by W.	0'2	16
N.W.	4'0	N.W. by N.	4'0	W.N.W.	3'0	N.W.	3'0	W.N.W.	3'0	W.N.W.	3'0	17
—	0'0	S.E. by S.	0'2	S.E. by S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	18
S. by W.	0'5	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	19
N.W.	2'0	W. by N.	2'5	N.N.W.	2'5	N.W.	3'0	N.W.	3'0	N.W.	3'0	20
S.E. by S.	0'2	S.E.	0'5	S.E.	0'2	S.E.	0'2	S.E.	0'2	E.S.E.	0'2	21
—	—	—	—	—	—	—	—	—	—	—	—	22
E.	0'2	E.	0'2	E.	0'2	—	0'0	E.	0'2	—	0'0	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	E.N.E.	0'2	—	0'0	25
—	0'0	S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	—	0'0	26
S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	27
N.W. by N.	0'5	N.W. by W.	0'5	N.W.	0'5	N.W.	0'2	N.W. by W.	0'2	W.S.W.	0'2	28
—	—	—	—	—	—	—	—	—	—	—	—	29
E. by S.	0'2	E.	0'2	E.	0'2	E.	0'2	S.W. by W.	1'0	W.S.W.	1'5	30

JANUARY.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 1'0	N.N.W.	1'0
—	—	—
0'5	W.S.W.	0'2
0'5	N.N.E.	0'2
2'5	N.W. by N.	1'5
0'0	—	0'0
1'5	S. by E.	1'0
0'5	N. by W.	0'5
—	—	—
0'0	N.	0'2
0'5	W.S.W.	0'2
0'2	E.S.E.	0'2
0'0	—	0'0
0'0	—	0'0
0'2	W.N.W.	0'2
—	—	—
0'2	S.S.W.	0'2
1'0	N.W.	1'5
1'0	S.	0'5
0'0	S.W. by S.	0'2
1'5	N.W.	1'5
0'2	N.E. by N.	0'2
—	—	—
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'2	S.W. by S.	0'2
2'0	W.N.W.	2'5
0'2	—	0'0
—	—	—
2'0	W.S.W.	1'0

DIRECTION AND FORCE OF THE WIND.												Mean Güttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	lbs. —	—	—	—	—	—	—	—	—	—	—	1
S.W. by W.	0'2	W.S.W.	0'2	S.W. by W.	0'2	S.W.	0'2	S.W. by S.	0'5	S.W. by S.	0'5	2
W.S.W.	0'2	W.	0'2	W.	0'2	—	0'0	—	0'0	N.N.W.	1'0	3
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4
W.N.W.	1'0	N.W.	1'0	N.W.	1'5	N.W.	1'0	N.W.	0'5	N.W.	0'5	5
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	6
S.	1'0	S.	0'5	S.S.W.	0'5	S.S.W.	0'5	S. by W.	0'5	S.S.W.	0'5	7
—	—	—	—	—	—	—	—	—	—	—	—	8
N. by W.	0'5	N. by W.	0'5	N. by W.	0'5	N.	0'2	—	0'0	N.	0'2	9
N.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	N.	0'2	10
W.S.W.	0'2	W.S.W.	0'2	—	0'0	—	0'0	W. by S.	0'2	W. by S.	0'2	11
—	0'0	—	0'0	—	0'0	—	0'0	S.E. by S.	0'2	S.E. by S.	0'2	12
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
S.S.W.	0'2	S. by W.	0'2	S.W.	0'5	W.S.W.	0'5	W. by S.	0'2	W. by S.	0'5	17
N.W.	1'0	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	18
S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	19
S.W. by W.	0'5	S.W. by W.	0'5	S.W.	1'0	S.W.	1'5	S.W.	1'5	S.W.	1'5	20
N.W. by N.	1'5	N.W.	1'5	N.W.	0'5	N.W.	0'2	N.W.	0'2	N.N.W.	0'2	21
—	—	—	—	—	—	—	—	—	—	—	—	22
E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E. by N.	0'2	25
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
S.W. by S.	0'2	S.W.	0'2	S.W.	0'2	W.S.W.	1'0	W.S.W.	1'5	W.S.W.	1'5	27
W. by N.	1'0	W. by N.	1'0	W.	1'0	W.	1'0	W.	1'0	W. by N.	0'5	28
—	—	—	—	—	—	—	—	—	—	—	—	29
E.	1'5	E. by S.	1'0	E.	1'0	E.	1'0	E. by N.	1'0	E.	1'5	30
W.S.W.	0'5	W.S.W.	0'5	S.W. by W.	0'5	S.W.	0'5	S.W.	0'5	S.W. by S.	1'0	31

JANUARY.

DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	3 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
FEBRUARY.	1	S.W. by S.	1'0	S.W. by W.	1'0	S.W.	0'5	W.S.W.	0'2	W.S.W.	0'2	W. by S.	1'5
	2	—	0'0	—	0'0	—	0'0	—	0'0	E.	0'2	E.	0'2
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	E.S.E.	0'2
	4	—	0'0	E. by N.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	E.S.E.	0'2
	5	W. by N.	0'5	W. by N.	0'5	W. by N.	0'5	W. by N.	0'5	W. by N.	0'5	W.N.W.	0'5
	6	—	—	—	—	—	—	—	—	—	—	—	—
	7	N.W. by N.	2'0	N.W.	2'0	N.W. by N.	2'0	N.W. by N.	2'0	N.W.	2'5	N.W. by N.	2'0
	8	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	N.E. by E.	0'2	E.N.E.	0'2	E. by N.	0'5
	9	W.N.W.	0'2	W.N.W.	0'2	W.S.W.	0'2	S.W.	0'5	S.W.	1'5	S.S.W.	2'0
	10	N. by W.	2'0	N. by W.	1'5	N. by W.	2'0	N.N.W.	2'5	N.N.W.	2'0	N. by W.	2'0
	11	N. by E.	0'5	N.N.E.	0'2	N. by E.	0'2	N.	0'5	N.	0'2	N.	0'2
	12	N.E. by N.	0'5	N.N.E.	0'2	N.N.E.	0'2	N.N.E.	0'2	N. by E.	0'2	N.	0'2
	13	—	—	—	—	—	—	—	—	—	—	—	—
	14	—	0'0	—	0'0	—	0'0	—	0'0	N.E.	0'2	N. by W.	0'2
	15	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'2
	16	—	0'0	N. by W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	18	S.E. by E.	0'2	S.E. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0
	19	S.E. by E.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2	E.	0'2
	20	—	—	—	—	—	—	—	—	—	—	—	—
	21	W.N.W.	1'5	W.	1'5	W.N.W.	1'5	W. by N.	1'0	N.W. by W.	1'5	N.W.	1'5
	22	—	0'0	—	0'0	—	0'0	—	0'0	S.S.E.	0'2	E.S.E.	0'2
	23	N.W.	0'2	—	0'0	W.	0'2	W.S.W.	0'2	W.	0'5	W.	1'0
	24	N.W. by W.	1'5	W.N.W.	0'5	W.N.W.	0'5	N.W.	1'0	N.W.	1'5	N.W.	1'5
	25	N.E. by E.	0'2	N.E.	0'2	N.E.	0'2	E.	0'2	E. by S.	0'2	S.E.	0'2
	26	S.E. by E.	0'2	S.E. by E.	0'2	S.E. by E.	0'2	S.E. by E.	0'2	S.W. by S.	0'2	S.W.	0'5
	27	—	—	—	—	—	—	—	—	—	—	—	—
	28	S. by E.	0'5	S.S.E.	0'5	S.S.E.	1'0	S. by E.	1'5	S. by E.	2'0	S.S.E.	1'5
	29	N.W.	0'2	N.W. by W.	0'5	N. by W.	0'2	N.N.W.	0'5	N. by W.	0'2	N.W. by W.	0'5

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
FEBRUARY.	1	W.N.W.	0'5	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	—
	2	E.	0'2	E.	0'2	—	0'0	E.	0'2	—	0'0	E. by N.
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	4	—	0'0	—	0'0	W.N.W.	0'2	W.N.W.	0'5	W.N.W.	0'2	W.
	5	W.N.W.	1'5	W.N.W.	1'5	W.N.W.	1'5	W. by N.	1'5	W.N.W.	1'0	W.N.W.
	6	—	—	—	—	—	—	—	—	—	—	—
	7	—	0'0	—	0'0	—	0'0	—	0'0	N. by E.	0'5	N. by E.
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	9	W.S.W.	1'5	W. by S.	0'5	N.W. by N.	0'5	N.W.	1'0	N.W. by W.	0'5	N.W. by W.
	10	N.	0'5	N. by E.	0'5	N. by E.	0'5	N. by E.	0'2	N. by E.	0'5	N. by E.
	11	—	0'0	—	0'0	—	0'0	N.N.E.	0'2	N.N.E.	0'2	N.N.E.
	12	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	13	—	—	—	—	—	—	—	—	—	—	—
	14	N. by W.	0'5	N. by W.	0'5	N. by W.	0'2	N. by W.	0'2	—	0'0	—
	15	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	16	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	18	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	19	E.N.E.	0'5	E.N.E.	0'5	E. by N.	0'5	E.	0'5	E.	0'5	E.
	20	—	—	—	—	—	—	—	—	—	—	—
	21	—	0'0	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	—
	22	E.N.E.	0'2	E.N.E.	0'2	N.E.	0'2	N.E.	0'2	—	0'0	—
	23	W. by N.	1'5	W.N.W.	1'5	W.N.W.	2'0	W.	1'0	W.N.W.	0'5	W.N.W.
	24	N.	1'5	N.	1'5	N.	1'5	N. by W.	0'5	N.N.W.	0'5	N.N.W.
	25	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—
	26	W. by S.	0'2	W. by S.	0'2	W.	0'2	W. by N.	0'2	N.W.	0'2	N.W. by W.
	27	—	—	—	—	—	—	—	—	—	—	—
	28	N.W. by W.	0'5	W.S.W.	0'2	N.W. by W.	0'2	—	0'0	N. by W.	0'2	N. by E.
	29	N.W.	1'0	N.N.W.	1'5	—	0'0	—	0'0	—	0'0	W.N.W.

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0.2	W. by S.	1.5
0.2	E.	0.2
0.0	E.S.E.	0.2
0.2	E.S.E.	0.2
0.5	W.N.W.	0.5
—	—	—
2.5	N.W. by N.	2.0
0.2	E. by N.	0.5
1.5	S.S.W.	2.0
2.0	N. by W.	2.0
0.2	N.	0.2
0.2	N.	0.2
—	—	—
0.2	N. by W.	0.2
0.0	N. by W.	0.2
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.2	E.	0.2
—	—	—
1.5	N.W.	1.5
0.2	E.S.E.	0.2
0.5	W.	1.0
1.5	N.W.	1.5
0.2	S.E.	0.2
0.2	S.W.	0.5
—	—	—
2.0	S.S.E.	1.5
0.2	N.W. by W.	0.5

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
W.	1.0	W.S.W.	0.5	W. by S.	0.5	W.	0.2	W.	1.0	W.N.W.	0.5	1
—	0.0	—	0.0	—	0.0	E.	0.2	—	0.0	E.	0.2	2
—	0.0	S.E.	0.2	—	0.0	S.S.W.	0.2	—	0.0	—	0.0	3
E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	E.	0.2	E.	0.2	4
W.N.W.	0.5	W. by N.	0.5	N.W.	1.0	W. by N.	1.0	N.W.	1.0	W.N.W.	1.5	5
—	—	—	—	—	—	—	—	—	—	—	—	6
N.W.	3.0	N.W.	2.5	N.N.W.	2.0	N.	1.0	N.N.W.	0.5	N. by W.	0.5	7
E.	0.2	E. by S.	0.5	E. by N.	0.2	E.S.E.	0.2	—	0.0	—	0.0	8
S.S.W.	2.0	S.W. by S.	2.0	S.S.W.	2.5	S.S.W.	3.0	S.W. by W.	2.0	W.S.W.	2.0	9
N. by W.	1.5	N.	1.5	N.	1.5	N.	1.5	N. by E.	1.0	N. by E.	1.0	10
N. by W.	0.2	N.W. by N.	0.2	E.N.E.	0.2	N.E. by E.	0.2	N.N.E.	0.2	—	0.0	11
N.	0.2	—	0.0	—	0.0	S.S.E.	0.2	S.S.E.	0.2	S.S.E.	0.2	12
—	—	—	—	—	—	—	—	—	—	—	—	13
N. by W.	0.2	N.E.	0.2	N.E.	0.5	N.E. by N.	0.5	N. by E.	0.5	N. by W.	0.2	14
N.N.W.	0.5	N.N.W.	0.2	S.S.W.	0.2	S.W. by S.	0.2	S.W.	0.2	S.W.	0.2	15
—	0.0	S.E. by S.	0.2	S.E. by S.	0.2	S.E. by S.	0.2	—	0.0	—	0.0	16
E.S.E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	S.E. by E.	0.2	—	0.0	17
—	0.0	—	0.0	—	0.0	E.S.E.	0.2	—	0.0	—	0.0	18
E.	0.2	E.	0.2	E.	0.2	E. by N.	0.5	E.N.E.	0.5	E.N.E.	0.5	19
—	—	—	—	—	—	—	—	—	—	—	—	20
W.N.W.	1.5	W.N.W.	1.0	W.N.W.	1.0	W.	0.5	W.	0.5	—	0.0	21
E.S.E.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	E.N.E.	0.2	E. by N.	0.2	22
W. by N.	1.5	W.S.W.	3.0	W.	3.0	W. by N.	2.0	W.	2.0	W. by N.	2.0	23
N.W.	1.0	N.W.	1.5	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.0	N.N.E.	1.0	24
S.E.	0.2	S.E. by S.	0.2	S. by E.	0.2	S. by E.	0.2	S.S.E.	0.2	—	0.0	25
S.W.	0.5	S.S.W.	0.5	S.S.W.	0.5	S.W. by W.	0.2	W. by N.	0.2	W. by S.	0.5	26
—	—	—	—	—	—	—	—	—	—	—	—	27
S.S.E.	1.0	S.S.E.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.S.W.	0.2	W. by N.	0.2	28
N.W.	1.5	N.W. by N.	2.5	N.W. by N.	2.5	N.N.W.	2.5	N.W. by N.	2.5	N.N.W.	2.0	29

FEBRUARY.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0.0	—	0.0
0.0	E. by N.	0.2
0.0	—	0.0
0.2	W.	0.2
1.0	W.N.W.	1.0
—	—	—
0.5	N. by E.	0.5
0.0	—	0.0
0.5	N.W. by W.	0.5
0.5	N. by E.	0.5
0.2	N.N.E.	0.2
0.0	—	0.0
—	—	—
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.5	E.	0.5
—	—	—
0.2	—	0.0
0.0	—	0.0
0.5	W.N.W.	0.5
0.5	N.N.W.	0.5
0.0	—	0.0
0.2	N.W. by W.	0.2
—	—	—
0.2	N. by E.	0.2
0.0	W.N.W.	0.2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
lbs.		lbs.		lbs.		lbs.		lbs.		lbs.		
—	0.0	—	0.0	—	0.0	N.	0.2	N. by E.	0.2	N. by E.	0.2	1
E. by N.	0.2	E. by N.	0.2	—	0.0	E. by N.	0.2	E. by N.	0.2	—	0.0	2
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	3
W.	0.2	W.	0.2	W.	0.5	W. by S.	0.2	W. by S.	0.2	W. by S.	0.5	4
—	—	—	—	—	—	—	—	—	—	—	—	5
N.W. by N.	5.0	N.W. by N.	1.5	N.W. by N.	2.5	N.W. by N.	2.0	N. by W.	1.5	N.N.W.	1.0	6
N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E.	0.2	N.E. by E.	0.2	7
—	0.0	—	0.0	—	0.0	—	0.0	E.S.E.	0.2	W.N.W.	0.2	8
N.W. by W.	0.2	N.W. by W.	1.5	N.W. by W.	1.5	N.W. by W.	1.0	N.W. by W.	2.0	N.N.W.	2.5	9
N.	1.0	N.	0.5	N.	0.5	N. by E.	0.5	N. by E.	0.5	N. by E.	0.5	10
N.N.E.	0.2	N. by E.	0.5	N. by E.	0.5	N. by E.	0.2	N. by E.	0.5	N.N.E.	0.5	11
—	—	—	—	—	—	—	—	—	—	—	—	12
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	13
—	0.0	—	0.0	—	0.0	—	0.0	N.	0.2	N. by W.	0.2	14
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	16
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.E. by E.	0.2	17
—	0.0	—	0.0	E.S.E.	0.2	E.S.E.	0.2	—	0.0	—	0.0	18
—	—	—	—	—	—	—	—	—	—	—	—	19
W. by N.	2.0	W. by N.	3.0	W.N.W.	2.5	W.N.W.	2.0	W.N.W.	2.0	W.N.W.	1.5	20
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
—	0.0	N. by E.	0.2	—	0.0	N. by W.	0.2	—	0.0	—	0.0	22
N.W. by W.	1.0	N.W. by W.	2.5	N.N.W.	1.5	N.W. by N.	1.5	N.W. by N.	2.5	N.W. by W.	1.5	23
N.N.E.	0.5	N. by E.	0.5	N.N.E.	0.5	N.E.	0.2	N.E. by E.	0.2	N.E. by E.	0.2	24
—	0.0	—	0.0	—	0.0	S.E. by S.	0.2	—	0.0	—	0.0	25
—	—	—	—	—	—	—	—	—	—	—	—	26
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S. by W.	0.2	27
N.	0.5	N.	1.0	N. by W.	1.0	N.N.W.	1.0	N.N.W.	0.5	N.W.	0.2	28
—	0.0	N.W. by W.	0.2	W. by N.	0.2	W.N.W.	0.5	W.N.W.	0.5	N. by E.	0.2	29

FEBRUARY.

Mean Göttingen Time.		DIRECTION AND FORCE OF THE WIND.											
		0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>
	2	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>
	3	N.N.E.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	—	0 <sup>0</sup>
	4	W. by S.	1 <sup>0</sup>	W.	0 <sup>5</sup>	W. by S.	0 <sup>2</sup>	W.S.W.	0 <sup>2</sup>	S.W. by W.	0 <sup>2</sup>	S.W. by S.	1 <sup>0</sup>
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	W. by S.	2 <sup>0</sup>	W. by S.	0 <sup>5</sup>	W.S.W.	0 <sup>5</sup>	W. by S.	1 <sup>0</sup>	W. by S.	1 <sup>3</sup>	W.S.W.	1 <sup>0</sup>
	7	N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.S.E.	0 <sup>2</sup>	S.S.E.	0 <sup>2</sup>
	8	S.	0 <sup>2</sup>	S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.S.W.	0 <sup>2</sup>	S.S.W.	1 <sup>0</sup>
	9	N. by W.	1 <sup>0</sup>	N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>2</sup>	N.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>	N. by W.	0 <sup>5</sup>
	10	N.	0 <sup>5</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>
	11	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	W.N.W.	1 <sup>0</sup>	W. by N.	1 <sup>0</sup>	W.N.W.	1 <sup>5</sup>	W.N.W.	2 <sup>0</sup>	W.N.W.	2 <sup>0</sup>	W.N.W.	2 <sup>0</sup>
	14	N.W. by W.	1 <sup>0</sup>	N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	W. by N.	1 <sup>0</sup>	W. by N.	1 <sup>0</sup>
	15	—	0 <sup>0</sup>	N.N.W.	0 <sup>2</sup>	N. by W.	0 <sup>2</sup>	N. by W.	0 <sup>5</sup>	N.W. by N.	1 <sup>0</sup>	N.W. by W.	1 <sup>5</sup>
	16	N.W. by N.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>5</sup>	S.S.W.	0 <sup>5</sup>
	17	E.S.E.	1 <sup>5</sup>	E.	1 <sup>5</sup>	E.	2 <sup>0</sup>	E. by N.	1 <sup>5</sup>	E.N.E.	1 <sup>5</sup>	E.N.E.	1 <sup>5</sup>
	18	N.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	N.E. by E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	S.E. by E.	0 <sup>2</sup>
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.N.E.	0 <sup>2</sup>	E.N.E.	0 <sup>5</sup>	E.N.E.	0 <sup>5</sup>
	21	N.W.	0 <sup>5</sup>	N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>5</sup>	N.W.	1 <sup>0</sup>	N.W. by W.	0 <sup>5</sup>
	22	N.N.W.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>
	23	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>
	24	N. by W.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N.N.E.	0 <sup>2</sup>	N.E. by E.	0 <sup>2</sup>	S.E. by E.	0 <sup>2</sup>	S.E.	0 <sup>2</sup>
	25	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E. by N.	0 <sup>2</sup>	E.	0 <sup>5</sup>
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	N.N.E.	0 <sup>5</sup>	N. by E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N. by W.	0 <sup>2</sup>
	28	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	E.S.E.	0 <sup>2</sup>	—	0 <sup>0</sup>
	29	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.S.W.	0 <sup>2</sup>	S. by W.	0 <sup>2</sup>
	30	N.	0 <sup>2</sup>	S.E. by E.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E.	0 <sup>5</sup>	E. by S.	0 <sup>5</sup>	N.E. by E.	0 <sup>5</sup>
	31	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.E. by S.	0 <sup>2</sup>

(continued)

Mean Göttingen Time.		DIRECTION AND FORCE OF THE WIND.											
		12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.	1	N.W.	0 <sup>5</sup>	W.N.W.	1 <sup>0</sup>	N.W.	0 <sup>2</sup>	N.W. by W.	0 <sup>2</sup>	W.	0 <sup>2</sup>	W.	0 <sup>2</sup>
	2	N.E. by N.	0 <sup>5</sup>	N.E. by N.	0 <sup>5</sup>	N.E.	1 <sup>0</sup>	N.E. by N.	1 <sup>0</sup>	N.E.	0 <sup>5</sup>	N.N.E.	1 <sup>0</sup>
	3	N.W. by W.	2 <sup>0</sup>	N.W. by W.	2 <sup>5</sup>	W.N.W.	1 <sup>5</sup>	W.N.W.	1 <sup>5</sup>	W. by N.	1 <sup>0</sup>	W.	0 <sup>5</sup>
	4	S.W. by W.	2 <sup>5</sup>	W.S.W.	1 <sup>5</sup>	W.S.W.	1 <sup>0</sup>	W.S.W.	0 <sup>5</sup>	W.S.W.	1 <sup>0</sup>	W.S.W.	1 <sup>5</sup>
	5	—	—	—	—	—	—	—	—	—	—	—	—
	6	W.N.W.	0 <sup>5</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	7	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	S.W.	0 <sup>2</sup>	—	0 <sup>0</sup>
	8	N.W. by N.	0 <sup>2</sup>	S.W. by W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>	S.W.	0 <sup>2</sup>
	9	N.	0 <sup>2</sup>	N.	0 <sup>5</sup>	N.N.E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>	N.E.	0 <sup>2</sup>
	10	N.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.N.W.	0 <sup>2</sup>	N.W. by N.	0 <sup>2</sup>	N.W. by N.	0 <sup>2</sup>
	11	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	12	—	—	—	—	—	—	—	—	—	—	—	—
	13	W. by N.	1 <sup>5</sup>	N.W. by W.	1 <sup>0</sup>	W.N.W.	1 <sup>0</sup>	N.W. by W.	1 <sup>0</sup>	N.W.	1 <sup>0</sup>	N.W.	0 <sup>5</sup>
	14	N.N.W.	2 <sup>5</sup>	N. by W.	2 <sup>0</sup>	N.N.W.	2 <sup>0</sup>	N.N.W.	1 <sup>5</sup>	N.N.W.	1 <sup>0</sup>	N.N.W.	0 <sup>5</sup>
	15	N. by W.	1 <sup>0</sup>	N. by W.	1 <sup>0</sup>	N.N.W.	1 <sup>0</sup>	N.N.W.	0 <sup>5</sup>	N.N.W.	0 <sup>2</sup>	N.W. by N.	0 <sup>2</sup>
	16	S.	0 <sup>5</sup>	S. by E.	0 <sup>5</sup>	S.S.E.	0 <sup>5</sup>	S.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>	E.S.E.	0 <sup>2</sup>
	17	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.E. by N.	0 <sup>2</sup>	N.E. by N.	0 <sup>2</sup>	—	0 <sup>0</sup>
	18	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	19	—	—	—	—	—	—	—	—	—	—	—	—
	20	E. by N.	0 <sup>5</sup>	E. by N.	0 <sup>5</sup>	E. by N.	0 <sup>2</sup>	S.S.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	W.S.W.	0 <sup>2</sup>
	21	N.	0 <sup>5</sup>	N.	0 <sup>5</sup>	N.	0 <sup>5</sup>	N. by W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	22	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	23	S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	N.W. by W.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	24	E.	0 <sup>2</sup>	—	0 <sup>0</sup>	E. by N.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	E.	0 <sup>5</sup>	—	0 <sup>0</sup>
	25	E. by N.	0 <sup>2</sup>	E.N.E.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	26	—	—	—	—	—	—	—	—	—	—	—	—
	27	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	28	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	29	W.N.W.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N. by E.	0 <sup>2</sup>	N.	1 <sup>0</sup>	N. by W.	0 <sup>5</sup>	—	0 <sup>0</sup>
	30	E. by N.	0 <sup>2</sup>	E.	0 <sup>2</sup>	E. by S.	0 <sup>2</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>	—	0 <sup>0</sup>
	31	S.W. by S.	0 <sup>2</sup>	S.W. by S.	0 <sup>2</sup>	S.S.W.	0 <sup>5</sup>	S.W.	0 <sup>5</sup>	N.W.	1 <sup>5</sup>	N.W. by W.	3 <sup>0</sup>

5 <sup>h</sup> .		
Force.	Direction.	Force.
0.2	N. by W.	0.2
0.2	N.E.	0.2
0.2	—	0.0
0.2	S.W. by S.	1.0
—	—	—
1.5	W.S.W.	1.0
0.2	S.S.E.	0.2
0.2	S.S.W.	1.0
0.5	N. by W.	0.5
0.5	N.N.W.	0.5
0.0	—	0.0
—	—	—
2.0	W.N.W.	2.0
1.0	W. by N.	1.0
1.0	N.W. by W.	1.5
0.5	S.S.W.	0.5
1.5	E.N.E.	1.5
0.2	S.E. by E.	0.2
—	—	—
0.5	E.N.E.	0.5
1.0	W. by W.	0.5
0.2	N.E. by N.	0.2
0.2	N.N.E.	0.2
0.2	S.E.	0.2
0.2	E.	0.5
—	—	—
0.0	N. by W.	0.2
0.2	—	0.0
0.2	S. by W.	0.2
0.5	N.E. by E.	0.5
0.0	S.E. by S.	0.2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
N.W. by N.	0.2	W.	0.2	W.	1.0	W.	1.0	W.	1.0	N.W.	1.0	1
E.N.E.	0.2	E.N.E.	0.2	E.S.E.	0.5	E. by N.	0.5	E. by N.	0.5	E. by N.	1.0	2
W.S.W.	0.2	S.W. by W.	0.2	W.S.W.	0.2	W.	1.5	W.	1.0	W.N.W.	2.0	3
S.W.	1.5	S.W.	1.5	S.W.	1.5	S.W.	2.0	S.W.	2.0	S.W.	2.5	4
—	—	—	—	—	—	—	—	—	—	—	—	5
W.S.W.	1.0	W. by S.	1.0	W.	1.5	W.N.W.	1.0	N.W. by W.	1.0	W.N.W.	0.5	6
S.E. by S.	0.2	S.E.	0.2	S.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	7
S.S.W.	1.0	S.W.	1.0	S.W.	0.5	S.W. by W.	1.0	N.W.	3.0	N.W. by N.	2.0	8
N.	0.5	N. by E.	0.2	N.E. by N.	0.2	N.E. by E.	0.2	N.	0.2	N.	0.2	9
N.N.W.	0.5	N.W.	0.5	N.W. by N.	0.5	N.N.W.	0.5	N.	0.5	N.	0.5	10
S. by W.	0.2	S. by E.	0.2	S. by E.	0.2	S.S.E.	0.2	S.E. by E.	0.2	S.E.	0.2	11
—	—	—	—	—	—	—	—	—	—	—	—	12
W.N.W.	2.0	W. by N.	2.0	W. by N.	2.0	N.N.W.	1.5	W.N.W.	1.5	W.N.W.	2.0	13
W.N.W.	1.0	N.N.W.	1.5	N.W.	2.0	N.N.W.	2.0	N. by E.	2.0	N.W. by N.	2.5	14
N.N.W.	1.5	N.N.W.	2.0	N.N.W.	2.0	N.N.W.	2.5	N. by W.	2.0	N. by W.	1.5	15
S.S.W.	0.5	S. by W.	0.5	S. by E.	0.5	S. by E.	1.0	S.S.E.	0.5	S.S.E.	0.5	16
E.N.E.	1.5	E.S.E.	1.0	E. by S.	0.5	E. by S.	0.5	E. by S.	0.2	E.N.E.	0.2	17
S.E. by E.	0.2	—	0.0	—	0.0	E. by S.	0.2	—	0.0	—	0.0	18
—	—	—	—	—	—	—	—	—	—	—	—	19
E.N.E.	0.2	E.N.E.	0.5	E.N.E.	1.0	E.N.E.	1.5	E.N.E.	2.0	E.N.E.	1.0	20
N.W. by W.	0.5	N.W.	1.0	N.W.	1.5	W.N.W.	1.5	N.W.	1.0	N. by W.	0.5	21
S.E. by E.	0.2	E.S.E.	0.2	S.E. by S.	0.2	—	0.0	—	0.0	—	0.0	22
S.S.W.	0.2	E.	0.5	S.S.E.	0.5	S. by W.	0.2	S.	0.2	S.	0.2	23
S.E. by E.	0.2	S.E. by E.	0.2	S.E.	0.2	S.E.	0.2	S.E.	0.2	E.S.E.	0.2	24
E. by N.	0.5	E.N.E.	0.5	E. by N.	0.5	E.N.E.	0.5	E. by N.	0.2	E. by N.	0.2	25
—	—	—	—	—	—	—	—	—	—	—	—	26
S.W.	0.2	N.N.W.	0.2	S.S.E.	0.2	S.S.E.	0.2	S.E. by S.	0.2	S.E. by E.	0.2	27
S.E. by S.	0.2	E.S.E.	0.2	S.E. by E.	0.2	E.	0.2	S.E.	0.2	—	0.0	28
S.S.W.	0.2	S.S.W.	0.2	W. by S.	0.5	S.W. by W.	0.2	W. by N.	0.2	W. by N.	0.2	29
E. by N.	0.2	E. by N.	0.2	E. by N.	0.2	E.	0.2	E.	0.5	E.	0.5	30
S.W. by S.	0.2	S.W.	1.5	W.S.W.	1.5	W.	1.0	W.	0.2	W.S.W.	0.2	31

MARCH.

17 <sup>h</sup> .		
Force.	Direction.	Force.
0.2	W.	0.2
0.5	N.N.E.	1.0
1.0	W.	0.5
1.0	W.S.W.	1.5
—	—	—
0.0	—	0.0
0.2	—	0.0
0.2	S.W.	0.2
0.2	N.E.	0.2
0.2	N.W. by N.	0.2
0.0	—	0.0
—	—	—
1.0	N.W.	0.5
1.0	N.N.W.	0.5
0.2	N.W. by N.	0.2
0.2	E.S.E.	0.2
0.2	—	0.0
0.0	—	0.0
0.0	W.S.W.	0.2
0.0	—	0.0
0.0	—	0.0
0.0	—	0.0
0.5	—	0.0
0.0	—	0.0
0.0	—	0.0
0.5	—	0.0
0.0	—	0.0
1.5	N.W. by W.	3.0

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	1
N.E.	1.0	N.E.	0.2	N.E.	0.2	N.E. by N.	0.2	N.E. by N.	0.5	N.E.	0.2	2
W.	0.5	W. by S.	0.2	W. by S.	0.2	W.S.W.	0.2	W.S.W.	0.5	W.S.W.	0.5	3
—	—	—	—	—	—	—	—	—	—	—	—	4
W. by S.	2.0	S.W.	1.5	S.W. by W.	1.0	W.S.W.	0.5	W.S.W.	0.5	W. by S.	1.5	5
—	0.0	—	0.0	—	0.0	N.N.W.	0.2	—	0.0	—	0.0	6
—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.E.	0.2	S. by W.	0.2	S.	0.2	7
S.W. by W.	0.2	N.N.W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	1.0	N. by W.	1.0	8
N.E.	0.2	N.E.	0.2	N. by E.	0.5	N. by E.	0.5	N. by E.	0.5	N. by W.	0.5	9
N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	10
—	—	—	—	—	—	—	—	—	—	—	—	11
W.N.W.	1.5	W.N.W.	1.0	W.N.W.	1.0	W.N.W.	1.0	W.N.W.	1.0	W. by N.	0.5	12
N.W.	0.2	N.W. by W.	0.2	N.W.	0.2	N.W. by W.	0.5	N.W. by W.	0.5	N.W. by W.	0.5	13
N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2	14
N.W. by N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	15
E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.2	E. by S.	0.5	E.S.E.	1.5	16
N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	N.N.E.	0.2	17
—	—	—	—	—	—	—	—	—	—	—	—	18
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	19
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	20
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	21
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	22
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	23
E.	0.2	E. by S.	0.2	E. by S.	0.2	E.	0.2	E.	0.2	E. by N.	0.2	24
—	—	—	—	—	—	—	—	—	—	—	—	25
N.	0.5	N.	0.5	N.	0.5	N.	0.5	N.	0.5	N.	1.0	26
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	27
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	28
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	29
—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	30
W.N.W.	2.0	W.N.W.	1.0	W.N.W.	1.0	W.N.W.	0.5	W.N.W.	0.5	W.N.W.	1.0	31

MARCH.



DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	W.N.W.	lbs. 2'0	W.N.W.	lbs. 2'0	W.N.W.	lbs. 1'5	W.N.W.	lbs. 2'5	W.N.W.	lbs. 3'0	W.N.W.	lbs. 3'0
	2	—	—	—	—	—	—	—	—	—	—	—	—
	3	—	0'0	—	0'0	E. by S.	0'2	E. by S.	0'2	E.S.E.	0'2	E.S.E.	0'2
	4	S.W. by S.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.W. by S.	0'2	S.W.	0'5	S.W.	0'2
	5	—	0'0	N.	0'2	N. by W.	0'2	N.W.	0'2	N.	0'2	N.E. by N.	1'2
	6	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	—	0'0
	7	N.	0'2	N.	0'2	N.	0'2	N.N.E.	0'2	N.	0'2	N. by W.	0'2
	8	—	0'0	—	0'0	—	0'0	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2
	9	—	—	—	—	—	—	—	—	—	—	—	—
	10	—	0'0	—	0'0	—	0'0	W.	0'2	S.W. by S.	0'2	S.W.	0'2
	11	E. by N.	0'2	E.	0'2	E. by N.	0'2	E. by S.	0'2	E. by S.	0'2	E. by S.	0'2
	12	—	0'0	—	0'0	—	0'0	S.S.W.	0'2	S.S.W.	0'2	S.	0'2
	13	W. by N.	1'5	W.	1'5	W.	1'5	W.S.W.	1'5	W.S.W.	1'5	W.S.W.	1'0
	14	N.W. by N.	0'5	N.W. by N.	0'5	N.	0'5	N.W. by N.	0'5	N.	0'5	N.E. by N.	0'5
	15	N. by W.	0'5	N. by W.	0'2	N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2	N.W. by N.	0'5
	16	—	—	—	—	—	—	—	—	—	—	—	—
	17	—	0'0	N.	0'2	N.N.W.	0'2	N.	0'2	N.W. by W.	0'2	N.	0'2
	18	E.	2'5	E.	2'5	E.	2'5	E. by N.	2'0	E. by N.	2'0	E.N.E.	1'5
	19	N. by E.	0'2	N.N.E.	0'2	N.N.E.	0'5	N. by E.	0'5	N. by E.	0'5	N.N.E.	0'2
	20	—	0'0	—	0'0	—	0'0	—	0'0	S.	0'2	S.	0'2
	21 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	—
	22	N.N.W.	1'0	W.	0'2	N.W.	0'2	N.W.	0'2	N.W.	0'2	—	0'0
	23	—	—	—	—	—	—	—	—	—	—	—	—
	24	W.N.W.	1'5	W. by N.	1'0	W. by N.	1'0	W.N.W.	1'0	W.N.W.	1'0	W.N.W.	1'0
	25	—	0'0	—	0'0	—	0'0	S. by W.	0'2	S. by W.	0'5	S. by E.	0'5
	26	—	0'0	—	0'0	N.W. by N.	0'2	N.W.	0'2	W. by S.	0'2	S.	0'5
	27	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2
	28	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0
	29	—	0'0	W. by N.	2'0	W.N.W.	2'5	W.N.W.	3'0	W.N.W.	3'0	N.W. by W.	3'0
	30	—	—	—	—	—	—	—	—	—	—	—	—

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
APRIL.	1	W.N.W.	lbs. 0'5	N.W.	lbs. 0'2	N.W.	lbs. 0'2	—	lbs. 0'0	—	lbs. 0'0	—	
	2	—	—	—	—	—	—	—	—	—	—	—	
	3	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	4	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	1'0
	5	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	6	N. by W.	1'0	N. by W.	1'0	N.	0'5	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2
	7	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	8	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	9	—	—	—	—	—	—	—	—	—	—	—	
	10	S.W.	0'2	—	0'0	N. by W.	0'2	—	0'0	—	0'0	—	
	11	—	0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'5	N.N.W.	0'2
	12	S.W.	0'2	S.W.	0'2	—	0'0	N.N.E.	0'2	W. by N.	0'2	S.E. by S.	0'2
	13	W.N.W.	1'0	N.W. by N.	0'5	N.N.W.	1'0	N.W. by N.	0'5	N.W. by N.	0'5	N.W. by N.	0'2
	14	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	15	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N. by W.	1'0	N.N.W.	0'5
	16	—	—	—	—	—	—	—	—	—	—	—	
	17	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	
	18	N.E. by E.	0'5	N.E.	1'0	N.E.	0'5	N.E. by E.	1'0	E.N.E.	1'0	N.E. by N.	1'0
	19	S.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	
	20	S.W.	1'5	S.W.	0'5	S.W.	0'2	—	0'0	—	0'0	—	
	21 <sup>a</sup>	—	—	—	—	—	—	—	—	—	—	—	
	22	—	0'0	—	0'0	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	
	23	—	—	—	—	—	—	—	—	—	—	—	
	24	W.N.W.	1'0	N.W. by W.	0'5	N.W. by N.	0'2	N.W.	0'2	—	0'0	—	
	25	E. by N.	0'2	S.S.W.	0'2	S.	0'2	S. by W.	0'2	S.W. by W.	0'2	W. by S.	0'2
	26	S.S.E.	0'2	S.	0'2	S.	0'2	S. by W.	0'2	—	0'0	—	
	27	—	0'0	S.S.E.	0'2	S.	0'5	—	0'0	—	0'0	—	
	28	—	0'0	—	0'0	—	0'0	E.	0'2	E. by N.	0'2	E. by N.	0'2
	29	N.W. by W.	2'0	N.W. by W.	1'5	N.W. by W.	0'5	N.W. by W.	0'2	N.W.	0'2	—	
	30	—	—	—	—	—	—	—	—	—	—	—	

\* Good Friday.

DIRECTION AND FORCE OF THE WIND.

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 3'0	W.N.W.	lbs. 3'0
—	—	—
0'2	E.S.E.	0'2
0'5	S.W.	0'2
0'2	N.E. by N.	1'2
0'2	—	0'0
0'2	N. by W.	0'2
0'2	S.W. by S.	0'2
—	—	—
0'2	S.W.	0'2
0'2	E. by S.	0'2
0'2	S.	0'2
1'3	W.S.W.	1'0
0'5	N.E. by N.	0'5
0'2	N.W. by N.	0'5
—	—	—
0'2	N.	0'2
2'0	E.N.E.	1'5
0'5	N.N.E.	0'2
0'2	S.	0'2
—	—	—
0'2	—	0'0
—	—	—
1'0	W.N.W.	1'0
0'5	S. by E.	0'5
0'2	S.	0'5
0'0	S. by E.	0'2
0'0	—	0'0
3'0	N.W. by W.	3'0

6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
W.N.W.	2'0	W.N.W.	2'0	W.N.W.	1'5	W.N.W.	1'0	N.W.	0'5	W.N.W.	0'5	1
—	—	—	—	—	—	—	—	—	—	—	—	2
E.S.E.	0'2	E.	0'2	E. by N.	0'2	E.N.E.	0'2	N. by E.	0'2	—	0'0	3
S.W.	0'2	S.W. by W.	0'2	—	0'0	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	4
S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W. by S.	0'5	S. by W.	0'5	5
S.	0'2	S.S.W.	0'5	S.S.W.	0'5	S.S.W.	0'2	S.S.W.	0'2	N. by W.	0'5	6
S.S.W.	0'5	S. by W.	0'5	S. by W.	0'5	S.	0'5	S.S.W.	0'2	S.S.W.	0'2	7
S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	8
—	—	—	—	—	—	—	—	—	—	—	—	9
S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W.	0'2	S.W.	0'2	10
E. by S.	0'2	E. by S.	0'5	E. by S.	0'2	E. by N.	0'2	E.	0'2	—	0'0	11
S.S.E.	0'2	S.	0'2	S. by E.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	S.W. by S.	0'2	12
W. by S.	1'0	W.N.W.	2'0	W.N.W.	2'0	W. by N.	2'5	W. by N.	2'5	W. by N.	1'5	13
N.E. by N.	0'5	S.S.E.	0'2	S.S.W.	0'2	S.W.	0'2	S.W. by S.	0'2	S.S.W.	0'2	14
N.	0'5	N.W. by W.	0'5	N.	1'0	N. by W.	1'0	N.	1'0	N. by W.	1'5	15
—	—	—	—	—	—	—	—	—	—	—	—	16
N.	0'2	S.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.	0'2	—	0'0	17
N. by E.	1'5	N.E. by N.	2'5	N.E.	2'0	N.E.	1'5	N.E. by E.	0'5	N.E. by E.	0'5	18
—	0'0	S.W. by S.	0'2	S. by W.	0'2	S.W. by S.	0'2	S.S.W.	0'2	S.S.W.	0'2	19
S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.	1'5	S.S.W.	2'5	S.W. by S.	1'0	20
—	—	—	—	—	—	—	—	—	—	—	—	21
N.W.	0'2	S. by W.	0'2	S. by W.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.	0'2	22
—	—	—	—	—	—	—	—	—	—	—	—	23
W.N.W.	1'0	W.	2'0	W.	2'5	W.	2'0	W.N.W.	1'0	W. by N.	1'0	24
S.E.	0'2	S.E. by E.	0'2	S.E. by E.	0'2	E.S.E.	0'2	E.S.E.	0'2	E.S.E.	0'2	25
S.	1'0	S.	0'5	S. by W.	0'5	S.S.E.	0'5	S.S.E.	0'2	S.S.E.	0'2	26
S. by E.	0'2	S.S.E.	0'2	S.S.E.	0'2	S.E. by S.	0'2	S.E.	0'2	—	0'0	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
N.W. by W.	2'5	N.W.	2'0	N.W.	3'0	N.W.	3'0	N.W.	2'5	W.N.W.	2'0	29
—	—	—	—	—	—	—	—	—	—	—	—	30

APRIL

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs. 0'0	—	lbs. 0'0
0'0	—	0'0
0'5	N. by W.	1'0
0'0	—	0'0
0'2	N. by W.	0'2
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
0'5	N.N.W.	0'2
0'2	S.E. by S.	0'2
0'5	N.W. by N.	0'2
0'0	—	0'0
1'0	N.N.W.	0'5
—	—	—
0'0	—	0'0
1'0	N.E. by N.	1'0
0'0	—	0'0
0'0	—	0'0
0'2	—	0'0
—	—	—
0'0	—	0'0
0'2	W. by S.	0'2
0'0	—	0'0
0'0	—	0'0
0'2	E. by N.	0'2
—	—	—

18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean Göttingen Time.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	—	—	—	—	—	—	—	—	—	—	—	1
E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E.N.E.	0'2	E.N.E.	0'2	—	0'0	2
S. by E.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	S. by E.	0'2	3
N.N.W.	0'5	N.N.W.	0'2	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	4
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	5
N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	N.	0'2	6
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	7
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	9
N.	0'2	N. by W.	0'5	—	0'0	—	0'0	—	0'0	—	0'0	10
N.N.E.	0'2	—	0'0	—	0'0	W.N.W.	1'0	W.N.W.	2'0	W. by N.	1'5	12
N.W. by N.	0'2	N.N.W.	1'0	N.N.W.	1'5	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'2	13
—	0'0	—	0'0	N.W. by N.	0'2	N.N.W.	0'2	N.N.W.	0'2	N.N.W.	0'5	14
—	—	—	—	—	—	—	—	—	—	—	—	15
N.N.W.	0'5	N. by W.	0'5	N. by W.	0'2	—	0'0	—	0'0	—	0'0	16
—	0'0	E.	0'5	E.	1'5	E.	2'0	E. by S.	2'5	E.	2'5	17
N.N.E.	0'5	N.N.E.	0'2	N.N.E.	0'5	N. by E.	0'5	N. by E.	0'5	N. by E.	0'5	18
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
—	—	—	—	—	—	—	—	—	—	—	—	20
W.	0'2	W. by N.	0'2	W.N.W.	0'5	W.N.W.	0'5	N.W.	0'5	N.N.W.	1'0	21
—	—	—	—	—	—	—	—	—	—	—	—	22
W. by N.	2'0	W. by N.	1'5	N.W. by N.	1'5	W.	1'0	W.	1'0	W.N.W.	1'5	23
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	24
W. by N.	1'5	N.N.W.	1'5	N.N.W.	0'2	—	0'0	—	0'0	—	0'0	25
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
—	0'0	—	0'0	E. by N.	0'2	E. by N.	0'2	E. by N.	0'2	E.N.E.	0'2	30

APRIL

Mean Gottingen Time.		DIRECTION AND FORCE OF THE WIND.											
		0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MAY.	1	E.N.E.	0.2	E. by N.	0.2	—	0.0	—	0.0	—	0.0	E. by S.	0.2
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.E.	0.2
	3	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.W.	0.2
	4	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E. by N.	0.2
	5	—	0.0	—	0.0	—	0.0	S.W. by S.	0.2	S.S.W.	0.2	S. by W.	0.5
	6	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	S. by W.	0.2
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	0.0	—	0.0	—	0.0	S. by W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	9	—	0.0	—	0.0	S.W. by W.	0.2	S.W. by S.	0.2	S. by W.	0.2	S.	0.2
	10	—	0.0	—	0.0	—	0.0	N. by W.	0.2	N.	0.2	N.	0.2
	11	N. by E.	0.2	N. by W.	0.2	N.	0.2	N. by W.	1.5	N. by E.	1.5	N. by E.	1.5
	12	N. by W.	0.5	N. by W.	0.5	N. by E.	0.5	N.N.W.	0.5	N.W. by N.	0.5	N.N.E.	0.5
	13	—	0.0	—	0.0	S. by W.	0.2	E. by S.	0.2	S.E.	0.5	S.E. by S.	1.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	N.	0.2	—	0.0	W.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.	0.2
	16	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	N.W.	0.2	S.S.W.	0.2
	17	—	0.0	—	0.0	—	0.0	S. by W.	0.2	S. by E.	0.2	S.	0.2
	18	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	19	—	0.0	—	0.0	—	0.0	—	0.0	S.E.	0.2	S.E.	0.2
	20	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	N. by E.	0.2	N.N.E.	0.2	N.N.E.	0.2	—	0.0	S.S.E.	0.2	S.S.E.	0.2
	23	E.	0.2	E. by S.	0.2	—	0.0	E.S.E.	0.2	S.E. by E.	0.5	E.	0.2
	24	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by S.	0.2
	25	—	0.0	—	0.0	S.W. by S.	0.2	S.W.	0.2	S.W. by W.	0.2	S.W. by S.	0.2
	26	—	0.0	—	0.0	N.W. by W.	0.2	N. by W.	0.2	N.W. by N.	0.2	W. by N.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.S.E.	0.2
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	30	—	0.0	—	0.0	N. by W.	0.2	N.N.W.	0.5	N.N.W.	1.0	N.N.W.	1.0
	31	N.N.W.	0.5	N.N.W.	1.5	N.	1.0	N. by W.	1.5	N. by W.	1.5	N.	1.5

(continued)

Mean Gottingen Time.		12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
			lbs.		lbs.		lbs.		lbs.		lbs.		lbs.
MAY.	1	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	3	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S. by E.	0.2
	4	E.N.E.	0.2	E.N.E.	0.2	E.	0.2	E.	0.2	E.N.E.	0.2	E. by N.	0.2
	5	S. by W.	2.5	S.S.W.	1.0	N.W.	2.0	N.	1.5	S. by E.	1.0	S.S.E.	0.5
	6	E.	0.2	N. by W.	0.2	N.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2
	7	—	—	—	—	—	—	—	—	—	—	—	—
	8	S.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	N.E.	0.2
	9	N. by W.	0.5	N.E.	0.2	N. by E.	0.5	N.	0.5	—	0.0	—	0.0
	10	—	0.0	N.	0.2	N. by E.	0.5	N.	0.5	N. by W.	1.0	N. by E.	0.5
	11	N.W. by N.	0.2	N.N.W.	0.2	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N.N.W.	0.2
	12	N.N.W.	0.5	N. by W.	0.2	N. by W.	0.2	—	0.0	—	0.0	—	0.0
	13	N.N.W.	2.5	N.N.W.	2.0	N.N.W.	2.0	N.N.W.	2.0	N. by W.	3.5	N. by W.	2.0
	14	—	—	—	—	—	—	—	—	—	—	—	—
	15	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	16	—	0.0	—	0.0	—	0.0	N.E. by N.	0.2	N.E. by N.	0.2	N.N.E.	0.2
	17	S. by W.	1.0	S.S.W.	1.0	S.W. by S.	0.2	—	0.0	—	0.0	—	0.0
	18	N.	0.2	S.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	19	—	0.0	—	0.0	—	0.0	E. by S.	0.2	—	0.0	—	0.0
	20	—	0.0	—	0.0	—	0.0	S.E. by E.	0.2	—	0.0	—	0.0
	21	—	—	—	—	—	—	—	—	—	—	—	—
	22	—	0.0	—	0.0	—	0.0	—	0.0	N.N.E.	0.2	N.N.E.	0.2
	23	E.	1.0	E.	1.5	E.	1.5	E.	1.5	E.	1.5	E.	1.5
	24	S.W.	1.0	S.W. by W.	1.0	S.W. by W.	1.0	S.S.W.	0.2	—	0.0	—	0.0
	25	N.E.	0.2	N. by E.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.5	N. by W.	0.5
	26	N. by E.	0.5	N. by W.	0.5	N. by W.	0.2	N.N.W.	0.2	N.N.W.	0.2	N. by W.	0.2
	27	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	28	—	—	—	—	—	—	—	—	—	—	—	—
	29	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	30	N.W. by W.	2.5	N.W. by N.	2.0	N.W.	0.5	W.N.W.	0.2	W.N.W.	0.2	N.W.	0.5
	31	N.N.W.	1.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0



DIRECTION AND FORCE OF THE WIND.													
Mean Göttingen Time.	0 <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	N.N.W.	0.2	N.N.W.	0.2	W. by S.	0.2	W.N.W.	0.2	N.W.	1.0	N.W. by N.	1.0
	2	—	0.0	—	0.0	—	0.0	S.	0.2	S.	0.2	S.	0.2
	3	—	0.0	—	0.0	—	0.0	—	0.0	S.W. by S.	0.2	S.W.	0.2
	4	—	—	—	—	—	—	—	—	—	—	—	—
	5	—	0.0	—	0.0	—	0.0	S.W. by S.	0.5	S.	0.5	S.	0.2
	6	W.	0.5	N.W. by W.	0.5	N.N.W.	1.0	N.N.W.	1.0	N.N.W.	1.5	N.N.W.	1.5
	7	N. by W.	0.2	N.N.W.	0.5	N.N.W.	1.0	N.N.W.	0.5	N.W. by N.	0.5	E. by N.	0.5
	8	N.	0.2	N.	0.2	N.	0.2	N.	0.2	S.	0.2	S.	0.2
	9	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	S.S.W.	0.2	S.S.W.	0.2
	10	—	0.0	—	0.0	W.S.W.	0.2	S.W. by S.	0.2	S. by W.	0.2	S.S.E.	0.2
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N. by W.	0.2	N.	0.5	N.N.W.	0.5	N.N.W.	1.0	N. by W.	1.0	N.N.W.	1.0
	13	N. by W.	0.2	N. by W.	1.0	N.	1.0	N.W. by N.	0.5	N.N.W.	1.0	N.N.W.	1.0
	14	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2
	15	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	16	W. by S.	0.2	W.	0.5	W.N.W.	0.5	W.	0.5	W. by S.	0.5	S. by W.	0.5
	17	—	0.0	—	0.0	—	0.0	—	0.0	S.S.W.	0.2	S. by W.	0.2
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	0.0	—	0.0	—	0.0	—	0.0	S.S.E.	0.2	S.S.E.	0.2
	20	—	0.0	—	0.0	S.S.W.	0.2	S. by W.	0.2	S.S.E.	0.2	S. by E.	0.5
	21	—	0.0	—	0.0	S.W. by S.	0.2	S.S.W.	0.2	N.W.	0.2	W.	0.2
	22	—	0.0	—	0.0	—	0.0	S.S.E.	0.2	S.S.E.	0.2	S.E. by E.	0.2
	23	E. by N.	0.2	—	0.0	E.	0.2	S.	0.2	S.S.W.	0.2	S.S.W.	0.2
	24	W. by S.	0.2	W.	0.2	W.	0.5	W. by N.	1.0	W.N.W.	1.0	W.N.W.	1.0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	—	0.0	—	0.0	—	0.0	—	0.0	S.	0.2	S.	0.2
	27	—	0.0	—	0.0	—	0.0	S. by E.	0.2	S.	0.2	S. by W.	0.5
	28	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	29	—	0.0	N.N.W.	0.2	E.N.E.	0.2	S. by E.	0.2	S.S.E.	0.2	S.S.E.	0.2
	30	—	0.0	—	0.0	—	0.0	—	0.0	S. by E.	0.2	S. by E.	0.2

(continued)

Mean Göttingen Time.	12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .		
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
JUNE.	1	—	lbs.	0.0	—	0.0	—	0.0	—	0.0	—	0.0	
	2	S.W. by W.	0.5	S.W. by W.	0.2	—	0.0	—	0.0	—	0.0	0.0	
	3	S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	0.0	
	4	—	—	—	—	—	—	—	—	—	—	—	
	5	N.W.	0.5	N.W. by N.	0.5	N.N.W.	0.5	N.N.W.	0.2	N.N.W.	0.2	N.W.	0.2
	6	N.	1.5	N.	1.0	N.	0.2	—	0.0	—	0.0	—	0.0
	7	N. by W.	0.5	N. by W.	0.5	N. by W.	0.5	N.N.W.	0.5	N. by W.	0.5	N. by W.	0.5
	8	E. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0
	9	—	0.0	—	0.0	N.N.W.	0.2	N.	0.2	N. by W.	0.2	N. by W.	0.2
	10	—	0.0	N.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	11	—	—	—	—	—	—	—	—	—	—	—	—
	12	N.N.W.	1.0	N.W.	1.0	N.W.	0.2	—	0.0	—	0.0	N.W.	0.2
	13	N.	1.0	N.	1.0	N.	0.5	N. by W.	0.2	—	0.0	—	0.0
	14	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	E.N.E.	0.2	E.N.E.	0.2
	15	W. by N.	0.5	W.	0.5	S.W. by W.	0.5	—	0.0	—	0.0	—	0.0
	16	W. by N.	0.5	W.S.W.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	17	—	0.0	—	0.0	—	0.0	—	0.0	S. by W.	0.2	—	0.0
	18	—	—	—	—	—	—	—	—	—	—	—	—
	19	—	0.0	—	0.0	—	0.0	—	0.0	—	0.0	W. by N.	0.2
	20	S. by W.	0.2	N.W.	0.2	S.W.	0.2	N.W. by W.	0.2	E.S.E.	0.2	S.S.W.	0.2
	21	W.N.W.	0.5	W.N.W.	0.5	W.N.W.	0.2	—	0.0	—	0.0	—	0.0
	22	E. by N.	0.2	E.N.E.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	23	W.N.W.	2.0	N.W. by W.	1.5	W.	1.0	W.	1.0	W.	0.5	W.	0.2
	24	W.N.W.	0.5	W.N.W.	0.2	W.N.W.	0.2	—	0.0	—	0.0	—	0.0
	25	—	—	—	—	—	—	—	—	—	—	—	—
	26	S.W. by S.	0.5	S.W. by S.	0.2	—	0.0	—	0.0	—	0.0	—	0.0
	27	S.W.	0.5	W.	0.2	W. by S.	0.2	—	0.0	—	0.0	—	0.0
	28	—	0.0	—	0.0	—	0.0	—	0.0	N. by W.	0.2	—	0.0
	29	—	0.0	—	0.0	—	0.0	—	0.0	E.N.E.	0.2	—	0.0
	30	S.E. by S.	0.2	—	0.0	—	0.0	—	0.0	S.W. by W.	0.2	W.	0.2

5 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
1'0	N.W. by N.	1'0
0'2	S.	0'2
0'2	S.W.	0'2
—	—	—
0'5	S.	0'2
1'5	N.N.W.	1'5
0'5	E. by N.	0'5
0'2	S.	0'2
0'2	S.S.W.	0'2
0'2	S.S.E.	0'2
—	—	—
1'0	N.N.W.	1'0
1'0	N.N.W.	1'0
0'2	S.S.W.	0'2
—	—	0'0
0'5	S. by W.	0'5
0'2	S. by W.	0'2
—	—	—
0'2	S.S.E.	0'2
0'2	S. by E.	0'5
0'2	W.	0'2
0'2	E. by S.	0'2
0'2	S.S.W.	0'2
1'0	W.N.W.	1'0
—	—	—
0'2	S.	0'2
0'2	S. by W.	0'5
—	—	0'0
0'0	S.S.E.	0'2
0'2	S.E. by S.	0'2

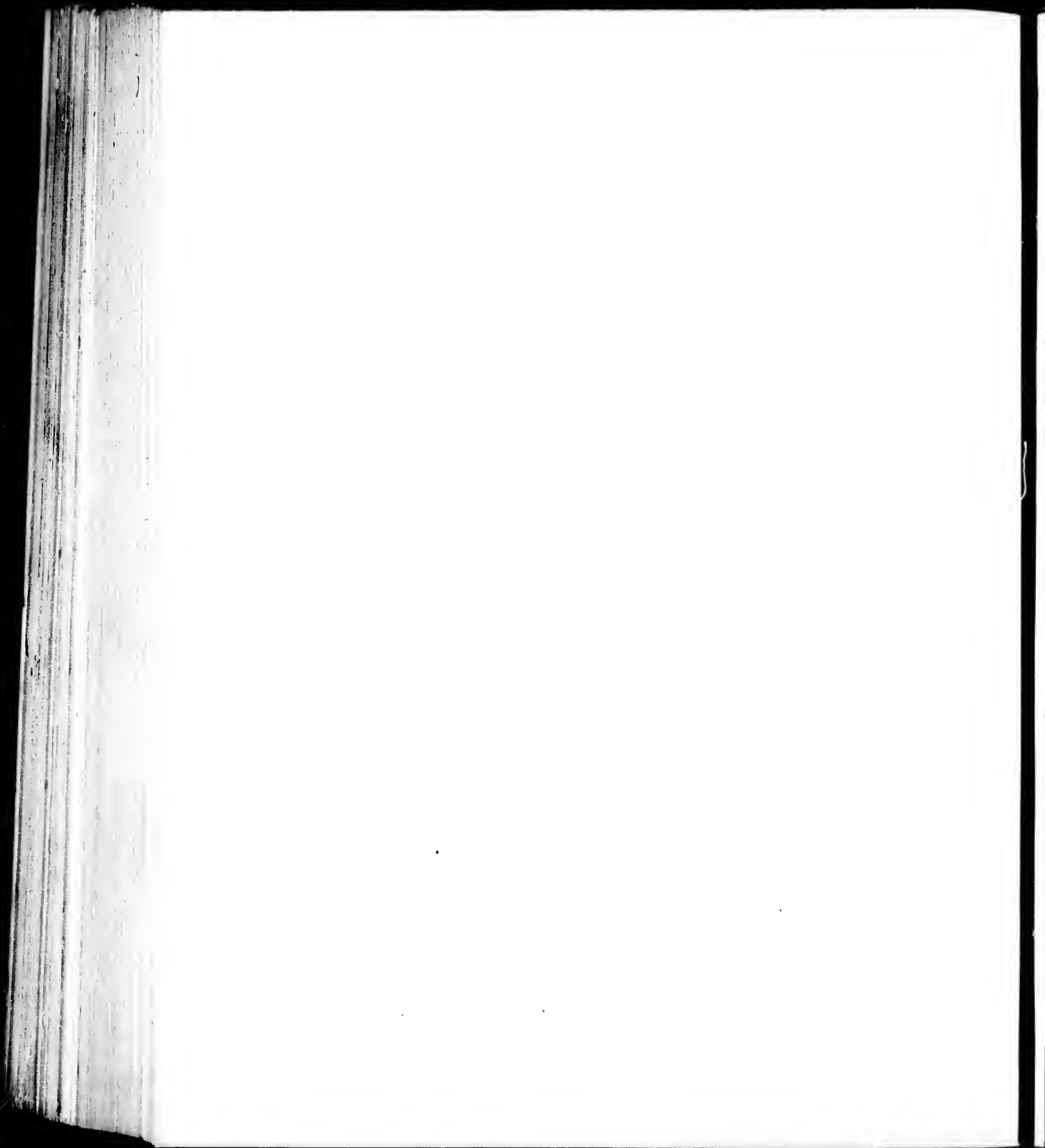
DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
N. by W.	1'0	N.N.W.	1'0	N.W.	1'0	S. by W.	0'2	S.	0'2	—	lbs.	1
S.S.W.	0'2	S. by W.	1'0	S. by W.	1'5	S. by W.	2'0	S.S.W.	1'5	S.W.	1'0	2
S.W.	0'2	W.S.W.	0'2	S.W.	0'5	S.W.	0'5	S.W.	0'5	S.W. by S.	0'2	3
—	—	—	—	—	—	—	—	—	—	—	—	4
S.E. by S.	0'2	S.	0'5	S.W.	0'5	S.	0'5	S. by W.	0'2	S.	0'2	5
N.N.W.	1'5	N.W.	1'0	N.N.W.	1'0	N.N.W.	0'5	N.	0'5	N.	2'0	6
N.W.	0'2	N.W.	1'0	N.W.	1'0	N.N.W.	1'0	N.N.W.	1'0	N.	1'0	7
S.S.W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.	0'2	—	0'0	—	0'0	8
S.S.W.	0'2	S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	—	0'0	—	0'0	9
S. by W.	0'2	S. by W.	0'2	S. by W.	0'2	S.S.W.	0'2	S.S.W.	0'2	S.W. by S.	0'2	10
—	—	—	—	—	—	—	—	—	—	—	—	11
N.W. by N.	1'5	N.W.	2'0	N.W.	1'5	N.W. by N.	1'0	N.W. by N.	1'0	N.N.W.	1'0	12
N.W.	1'5	N.N.W.	2'0	N.W.	2'5	N.N.W.	2'0	N.N.W.	2'0	N.	1'0	13
S.W. by S.	0'5	S.S.W.	0'2	—	0'0	S.S.E.	0'2	E.S.E.	0'2	—	0'0	14
N.W. by W.	1'0	W. by N.	1'0	W.N.W.	0'5	W.	1'0	W. by N.	1'0	W.N.W.	0'5	15
W. by N.	0'5	S.S.W.	0'5	S.S.W.	0'5	S.W. by S.	0'5	S.W. by S.	0'2	—	0'0	16
S.S.E.	0'2	S.W.	0'2	—	0'0	—	0'0	S.E. by E.	0'2	—	0'0	17
—	—	—	—	—	—	—	—	—	—	—	—	18
—	0'0	—	0'0	E.S.E.	0'2	S.E.	0'2	S.S.E.	0'2	—	0'0	19
S.W.	0'2	E. by N.	0'2	E.S.E.	0'2	E.S.E.	0'2	S.E. by E.	0'2	W. by N.	2'5	20
W. by N.	0'5	W.N.W.	0'5	W.N.W.	1'0	N.W. by W.	0'2	W.N.W.	0'2	W.N.W.	0'2	21
E. by S.	0'2	E.	0'2	E.	0'2	E.	0'2	E. by S.	0'2	E. by N.	0'2	22
S.S.W.	1'5	S.S.W.	1'5	W.S.W.	3'5	W. by S.	4'0	W. by S.	2'5	W. by N.	3'0	23
W.N.W.	1'5	W. by S.	1'5	W.	1'5	W.	1'0	N.W. by W.	1'0	W.N.W.	0'5	24
—	—	—	—	—	—	—	—	—	—	—	—	25
S.	0'2	S.E.	0'2	S.E. by E.	0'2	S.E.	0'2	S.E.	0'2	S. by E.	0'5	26
S. by W.	0'5	S.S.W.	0'5	S. by W.	0'5	S.S.W.	0'5	S.S.W.	1'0	S.W. by W.	1'0	27
—	0'0	N.N.W.	0'2	N.	0'2	N.	0'2	N.N.W.	0'2	N.N.W.	0'2	28
S.	0'2	S.	0'2	S.	0'2	S.S.E.	0'2	—	0'0	—	0'0	29
E. by S.	0'2	S.E.	0'2	E. by S.	0'2	S.E.	0'2	S.E. by E.	0'5	S.E. by E.	0'2	30

JUNE.

17 <sup>h</sup> .		
Force.	Direction.	Force.
lbs.		lbs.
0'0	—	0'0
0'0	—	0'0
0'0	—	0'0
—	—	—
0'2	N.W.	0'2
0'0	—	0'0
0'5	N. by W.	0'5
0'0	—	0'0
0'2	N. by W.	0'2
0'0	—	0'0
—	—	—
0'0	N.W.	0'2
0'0	—	0'0
0'2	E.N.E.	0'2
0'0	—	0'0
0'0	—	0'0
0'2	—	0'2
—	—	—
0'0	W. by N.	0'2
0'2	S.S.W.	0'2
0'0	—	0'0
0'0	—	0'0
0'5	W.	0'2
0'0	—	0'0
—	—	—
0'0	—	0'0
0'0	—	0'0
0'2	—	0'2
0'2	W.	0'2

DIRECTION AND FORCE OF THE WIND.												Mean Göttingen Time.
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	1
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	2
—	—	—	—	—	—	—	—	—	—	—	—	3
N.N.W.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	4
N.W.	0'2	W.N.W.	0'2	—	0'0	—	0'0	—	0'0	W.	0'5	5
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N. by W.	0'2	6
N.	0'5	N.	0'2	N.	0'2	N. by W.	0'5	N. by W.	0'5	N. by W.	0'2	7
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	8
N.	0'2	N.	0'2	—	0'0	—	0'0	—	0'0	—	0'0	9
—	—	—	—	—	—	—	—	—	—	—	—	10
N. by W.	0'2	N. by W.	0'2	N. by W.	0'2	—	0'0	—	0'0	—	0'0	11
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.N.W.	0'2	12
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	13
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	14
—	0'0	W. by N.	0'2	W. by N.	0'2	—	0'0	—	0'0	—	0'0	15
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	16
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	17
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	18
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	19
S.W.	0'2	—	0'0	—	0'0	—	0'0	W.N.W.	0'2	—	0'0	20
—	0'0	—	0'5	—	0'0	—	0'0	—	0'0	—	0'0	21
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	22
W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	W. by S.	0'2	—	0'0	23
—	—	—	—	—	—	—	—	—	—	—	—	24
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	25
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	26
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	N.W. by W.	0'2	27
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	28
—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	—	0'0	29
W.N.W.	1'0	—	0'0	N.W.	0'2	N.W.	0'2	N.W.	0'2	N.W. by W.	0'2	30

JUNE.



TORONTO, 1846 to 1848.

METEOROLOGICAL JOURNAL.



Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
D. JANUARY.								
1	Clouded all day; cir. cir.-strat. and haze; snow, sleet, and rain	1'0	1'0	1'0	1'0	29'0	9'5	0'250
2	Clouded all day; cir.-cum. and haze; rain and snow till 13 <sup>h</sup> , when it ceased	1'0	1'0	1'0	1'0	38'7	28'7	0'450
3	Cloudy all day; cir.-cum. and haze; occasional rain	0'9	1'0	—	—	38'2	28'5	—
4	In general clouded; cir.-cum. and haze; halo round the moon at 10 <sup>h</sup> , imperfect	—	—	0'5	0'9	36'0	28'2	—
5	In general clouded, with cir.-cum. and haze, except from 13 <sup>h</sup> to 15 <sup>h</sup> , when it was clear	0'8	1'0	0'0	1'0	36'2	26'7	—
6	Clouded all day; cir.-cum. and haze; snow and rain mixed from 8 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	1'0	1'0	36'2	23'0	0'180
7	Clouded all day; dense haze; slight rain till 19 <sup>h</sup> ; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	1'0	1'0	1'0	1'0	34'9	27'7	0'130
8	Clouded all day; cir.-cum. and haze; slight snow occasionally; clouded at 21 <sup>h</sup>	1'0	1'0	1'0	0'2	36'4	33'2	0'180
9	Partially clouded to 1 <sup>h</sup> ; cir.-cum. cir.-strat. and haze	1'0	1'0	1'0	1'0	33'8	28'0	—
10	Cloudy; cir.-cum. cir.-strat. and haze; occasional snow	1'0	1'0	—	—	30'4	26'1	—
11	Clouded all day; cir.-cum. cir.-strat. and haze; some slight snow	—	—	1'0	1'0	31'6	23'7	—
12	Clouded till 8 <sup>h</sup> ; cir.-cum.; cir.-strat.; remainder of the day clear	1'0	0'3	0'3	1'0	32'5	24'9	—
13	Generally clouded; cir.-cum. cir.-strat. and haze; clear intervals occasionally; imperfect halo round the moon at 10 <sup>h</sup> , diameter 40 <sup>l</sup>	1'0	0'3	1'0	1'0	27'7	9'0	—
14	Clouded till 4 <sup>h</sup> ; cir.-cum. cir.-strat. and haze; remainder clear; slight snow from 19 <sup>h</sup> to 22 <sup>h</sup>	1'0	0'0	0'0	0'0	29'5	9'7	—
15	Clear till 2 <sup>h</sup> ; remainder of the day clouded; cir.-cum. cir.-strat. and haze	0'4	0'8	1'0	1'0	35'2	18'1	—
16	Generally clouded; cir.-cum. cir.-strat. and haze; halo round the moon at 14 <sup>h</sup> and 15 <sup>h</sup> , imperfect	1'0	0'6	1'0	1'0	40'4	18'4	—
17	Generally clouded; cir.-cum. cir.-strat. and haze	1'0	0'3	—	—	31'7	11'2	—
18	Clear at 10 <sup>h</sup> and 11 <sup>h</sup> ; remainder of the day clouded; cir.-cum. and cir.-strat.; clouded at 18 <sup>h</sup> & 19 <sup>h</sup>	—	—	1'0	0'2	42'7	—1'2	—
19	Clouded at 13 <sup>h</sup> to 17 <sup>h</sup> ; cir.-cum. cir.-strat. and haze; remainder clear	0'1	0'0	1'0	1'0	29'9	0'9	—
20	Clouded all day; cir.-cum. cir.-strat. and haze	1'0	1'0	1'0	1'0	17'7	5'5	—
21	Clouded till 4 <sup>h</sup> ; cir.-cum. and haze; remainder clear; snow from 21 <sup>h</sup> to 23 <sup>h</sup>	1'0	0'0	0'0	0'0	25'2	9'5	—
22	Snow from 1 <sup>h</sup> to 4 <sup>h</sup> ; afterwards clear	0'0	0'0	0'0	0'1	27'9	1'1	—
23	Clear till 14 <sup>h</sup> ; remainder clouded; cir.-strat. and haze	0'0	0'0	1'0	0'7	20'1	—1'3	—
24	Cloudy; cir.-strat. and haze; clouded from 18 <sup>h</sup> to 23 <sup>h</sup>	0'2	0'0	—	—	23'2	5'9	—
25	Clouded from 12 <sup>h</sup> to 17 <sup>h</sup> ; cir.-strat. and haze; remainder clear; rain from 16 <sup>h</sup> to 17 <sup>h</sup>	—	—	1'0	1'0	37'0	19'6	—
26	Clouded till 13 <sup>h</sup> ; cir.-cum. and haze; misty; remainder clear; slight rain and snow occasionally	1'0	1'0	0'0	0'2	44'0	31'7	0'265
27	Generally clear till 6 <sup>h</sup> ; remainder overcast with dense haze	0'2	1'0	0'9	1'0	37'3	17'7	—
28	Clouded all day; cir.-cum. and haze	1'0	1'0	1'0	1'0	31'7	15'5	—
29	Clouded all day; cir.-cum. and haze; slight rain from 2 <sup>h</sup> to 5 <sup>h</sup> , and from 15 <sup>h</sup> to 20 <sup>h</sup>	1'0	1'0	1'0	1'0	38'0	31'5	0'250
30	Clouded all day; cir.-cum. and haze; slight rain from 18 <sup>h</sup> to 20 <sup>h</sup>	1'0	1'0	1'0	0'6	37'7	33'2	0'320
31	Clouded at 9 <sup>h</sup> and 10 <sup>h</sup> , and from 18 <sup>h</sup> to 21 <sup>h</sup> ; clear from 22 <sup>h</sup> to 23 <sup>h</sup>	0'2	0'0	—	—	42'0	17'0	—
FEBRUARY.								
1	—	—	—	—	—	20'9	8'3	—
2	Clouded all day; cir.-cum. cir.-strat. and haze	1'0	1'0	1'0	1'0	22'2	9'1	—
3	Clouded; cir.-cum. and cir.-strat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30 <sup>l</sup> , perfect	1'0	1'0	0'4	0'3	32'5	22'5	—
4	Clouded till 11 <sup>h</sup> ; cir. cir.-strat. cir.-cum. and haze; clear	1'0	1'0	0'0	0'4	41'9	28'7	—
5	Clouded till 11 <sup>h</sup> ; cir.-cum. and cum.-strat.; clear	1'0	0'7	0'2	0'0	40'1	28'1	—
6	Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; cir.-cum. and haze; clear	0'7	1'0	0'4	0'1	40'0	23'0	—
7	—	1'0	0'0	—	—	39'2	23'6	—
8	Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; cir.-cum. cir.-strat. and haze; clear	—	—	1'0	1'2	40'0	11'0	—
9	Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40 <sup>l</sup> , perfect	0'0	0'3	0'0	1'0	20'9	10'3	—
10	Clouded; cir.-cum. and haze; snowing slightly all day	1'0	1'0	1'0	1'0	16'5	1'2	—
11	Clouded till 14 <sup>h</sup> ; cir.-cum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup>	1'0	1'0	0'0	0'2	28'0	1'6	—
12	Clear till 19 <sup>h</sup> , afterwards clouded; cir.-cum. and haze	0'6	1'0	1'0	1'0	23'7	—3'4	—
13	Clouded; cir.-cum. and haze; halo round the moon at 16 <sup>h</sup> and 17 <sup>h</sup> , diameter 40 <sup>l</sup> , perfect	0'9	1'0	0'8	1'0	21'4	—7'0	—
14	—	1'0	1'0	—	—	35'2	12'8	—
15	Clouded; cir.-cum. cir.-strat. and haze; snow commences at 4 <sup>h</sup> and continues all night	—	—	1'0	1'0	31'4	15'5	—
16	Overcast; cir.-cum. cir.-strat. and haze; slight snow from 0 <sup>h</sup> to 10 <sup>h</sup>	1'0	1'0	1'0	1'0	25'3	13'2	—
17	Clouded; cir.-cum. cum.-strat.; slight fall of snow from 2 <sup>h</sup> to 12 <sup>h</sup>	1'0	1'0	0'1	0'8	27'7	18'9	—
18	Partially clouded; cir.-cum. cum.-strat.; after part of day clear	0'0	0'0	0'0	1'0	30'9	4'0	—
19	Clouded; cir.-cum. cir.-strat. and haze; halo round the sun at 21 <sup>h</sup> and 23 <sup>h</sup> , diameter 30 <sup>l</sup>	1'0	1'0	1'0	1'0	27'2	4'5'1	—
20	Clouded; cir.-cum. and haze; snowing most part of the day	1'0	1'0	1'0	0'4	29'6	6'7'0	—
21	—	1'0	1'0	0'0	—	29'8	22'7	—
22	Clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; overcast from 18 <sup>h</sup> to 23 <sup>h</sup>	—	—	—	1'0	32'9	13'3	—
23	Overcast from 0 <sup>h</sup> to 3 <sup>h</sup> ; cir.-strat. cir.-cum. and haze; clouded from 20 <sup>h</sup> to 23 <sup>h</sup>	0'2	1'0	0'0	0'0	26'9	13'1	—
24	Clouded at 12 <sup>h</sup> ; cir.-cum. cir. and haze; snow squalls	1'0	0'8	0'0	0'0	27'0	10'1	—
25	Clouded from 9 <sup>h</sup> to 14 <sup>h</sup> ; cir.-cum. cir.-strat. and haze; snowing slightly	1'0	1'0	0'0	0'0	21'2	0'2	—
26	Generally clear; light cir.-cum. dispersed from 18 <sup>h</sup> to 23 <sup>h</sup>	0'2	0'4	0'0	0'0	17'8	—11'7	—
27	Clouded; cir.-cum. and haze; occasionally slight snow	1'0	1'0	1'0	1'0	19'9	—16'4	—
28	—	1'0	1'0	1'0	—	17'8	—16'7	—
Mar. 1	Clouded till 11 <sup>h</sup> ; cir.-strat. and haze; slight fall of snow	—	—	—	0'0	—	—	—

\* Taken from the lowest reading of the Standard Thermometer.

Y.	Max. Therm.	Min. Therm.	Rain.
21			In.
1°0	29°0	9°5	0°25
1°0	38°7	28°7	0°45
—	38°2	28°5	—
0°9	36°0	28°2	—
1°0	36°2	26°7	—
1°0	36°2	23°0	0°18
1°0	34°9	27°7	0°43
0°2	36°4	33°2	0°18
1°0	33°8	28°0	—
—	30°4	26°1	—
1°0	31°6	23°7	—
1°0	32°5	21°9	—
1°0	27°7	9°0	—
0°0	29°5	9°7	—
1°0	35°2	18°1	—
1°0	40°4	18°4	—
—	31°7	11°2	—
0°2	12°7	—1°2	—
1°0	20°9	0°9	—
1°0	17°7	5°5	—
0°0	25°2	9°5	—
0°1	27°9	1°1	—
0°7	20°1	—1°3	—
—	23°2	5°9	—
1°0	37°0	19°6	—
0°2	44°0	31°7	0°26
1°0	37°3	17°7	—
1°0	31°7	15°5	—
1°0	38°0	31°5	0°25
0°6	37°7	33°2	0°33
—	42°0	17°0	—
—	20°9	8°3	—
1°0	22°2	9°1	—
0°3	32°5	22°5	—
0°4	41°9	28°7	—
0°0	40°1	28°1	—
0°1	40°0	23°0	—
—	39°2	23°6	—
1°2	40°0	11°0	—
1°0	20°9	10°3	—
1°0	16°5	4°2	—
0°2	28°0	1°6	—
1°0	23°7	—3°4	—
1°0	21°4	—7°0	—
—	35°2	12°8	—
1°0	31°4	15°5	—
1°0	25°3	13°2	—
0°8	27°7	18°9	—
1°0	30°9	4°0	—
1°0	27°2	—5°1	—
0°1	29°6	—7°0	—
—	29°8	—2°7	—
1°0	32°9	13°3	—
0°0	26°9	13°1	—
0°0	27°0	10°1	—
0°0	21°2	0°2	—
0°0	17°8	—11°7	—
1°0	10°9	—16°4	—
—	17°8	—16°7	—
0°0	—	—	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MARCH.								
0.						°	°	In.
2	Partially clouded till 7 <sup>h</sup> ; cir., cir.-strat., and haze; afterwards clear	0°2	0°0	0°0	0°1	20°7	10°0	—
3	Clouded from 4 <sup>h</sup> to 10 <sup>h</sup> ; cir., cir.-strat., and haze; clear; halo round the moon, diameter 40°	0°5	0°7	0°0	0°8	27°4	8°3	—
4	Clouded from 21 <sup>h</sup> to 23 <sup>h</sup> ; cum.-strat., cir.-cum., and cir.-strat.	0°4	0°0	0°3	0°2	30°4	9°3	—
5	Nearly clear till 8 <sup>h</sup> , then clouded; cir.-cum., cir.-strat., and haze	0°1	1°0	1°0	1°0	38°9	14°6	—
6	Clouded till 5 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; cleared up	1°0	0°0	0°3	1°0	43°9	26°9	—
7	Clouded; cir.-cum., and haze; snow from 0 <sup>h</sup> to 3 <sup>h</sup>	1°0	1°0	—	—	31°0	8°8	—
8		—	—	1°0	0°7	31°2	10°8	—
9	Clear till 5 <sup>h</sup> ; clouded; cir.-cum., cir.-strat., and haze	0°0	1°0	1°0	0°0	46°2	22°7	—
10	Clear, except light cir. strat. round horizon	0°0	0°0	0°2	0°3	38°1	28°3	—
11	Clear till 6 <sup>h</sup> ; clouded; cir.-cum., cir.-strat., and haze; halo round the moon from 9 <sup>h</sup> to 15 <sup>h</sup> ; diameter 30°	0°0	1°0	1°0	1°0	40°8	24°7	—
12	Clouded; cir.-cum., cum.-strat., cir.-strat., and haze; slight rain at 2 <sup>h</sup> , 3 <sup>h</sup> , and from 12 <sup>h</sup> to 17 <sup>h</sup>	1°0	1°0	1°0	1°0	40°7	28°8	0°18
13	Clouded; cir.-cum., and haze; rain; mist rising from the ground	1°0	1°0	1°0	1°0	44°1	33°0	0°77
14	Clouded; cir.-cum., and haze; slight snow from 4 <sup>h</sup> to 9 <sup>h</sup>	1°0	1°0	—	—	45°4	34°2	—
15		—	—	1°0	0°7	40°0	28°2	—
16	Clouded till 3 <sup>h</sup> ; cir.-cum., cum.-strat., and haze; clear	0°9	0°0	0°0	1°0	38°9	28°4	—
17	Clouded; cir.-cum., cum.-strat., and haze; faint streamers in N. at 9 <sup>h</sup>	0°0	0°0	0°0	1°0	35°2	22°8	—
18	Clouded all day; cir.-cum., cum.-strat., and haze	0°8	1°0	1°0	1°0	36°4	20°4	—
19	Clouded at 6 <sup>h</sup> , 13 <sup>h</sup> , 15 <sup>h</sup> , and 17 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; halo round the sun at 0 <sup>h</sup> ; diameter 35°	1°0	0°0	1°0	1°0	40°7	20°8	—
20	Clouded; cir.-cum., cir.-strat., and haze; halo round the sun, diameter 30°; rain from 7 <sup>h</sup> to 9 <sup>h</sup>	0°9	1°0	1°0	1°0	49°6	27°7	—
21	Clouded; cum.-strat. and cir.-cum.; clear	0°0	0°0	—	—	48°1	27°2	—
22		—	—	0°4	0°2	38°4	24°1	—
23	Clouded; cir.-cum., cir.-strat., and haze; rain from 5 <sup>h</sup> to 11 <sup>h</sup> ; solar halo, diameter 30°	1°0	1°0	1°0	1°0	40°9	24°2	0°08
24	Clouded; cir.-cum., and haze; rain	1°0	1°0	1°0	1°0	44°7	34°1	0°33
25	Clouded; cir.-cum., and haze; rain	1°0	1°0	1°0	0°4	40°7	37°3	0°57
26	Clouded; cum.-strat., cir.-cum., and haze; rain	1°0	1°0	1°0	0°7	41°7	35°2	—
27	Clouded; cir.-cum., and haze; rain from 5 <sup>h</sup> to 8 <sup>h</sup>	1°0	0°0	0°8	1°0	47°4	35°3	0°06
28	Clouded; cir.-cum., and haze; snow from 18 <sup>h</sup> to 23 <sup>h</sup>	1°0	1°0	—	—	45°1	33°8	—
29		—	—	1°0	0°5	41°9	31°7	—
30	Clouded; cum.; cir.-cum.; slight fall of snow	1°0	0°4	0°8	0°4	39°6	19°7	—
31	Clouded; cir.-cum.; cum.-strat.; clear	1°0	0°0	0°0	0°0	40°4	28°2	—
APRIL.								
1	Clear all day	0°0	0°0	0°0	0°0	43°9	26°7	—
2	Clear all day	0°0	0°0	0°0	0°0	43°1	25°7	—
3	Clear all day	0°0	0°0	0°0	0°5	43°0	29°5	—
4	Clear till 7 <sup>h</sup> ; clouded; cir.-strat. and haze; halo round the moon at 8 <sup>h</sup> and 9 <sup>h</sup> , diameter 35°; rain at intervals	0°0	1°0	—	—	46°3	30°5	—
5		—	—	1°0	1°0	50°4	31°7	0°19
6	Clouded; cir.-cum., cir.-strat., and haze; lunar halo at 10 <sup>h</sup> , diameter 35°, imperfect	1°0	1°0	1°0	1°0	54°3	41°1	—
7	Clouded all day; cir.-cum., cir.-strat., and haze; rain till 8 <sup>h</sup>	1°0	1°0	1°0	0°6	52°5	42°7	0°06
8	Mostly clear; a few cir.-cum. dispersed	0°1	0°0	0°4	0°7	56°1	33°4	—
9	Generally clouded; cir.-cum., strat., and haze; lunar halo at 10 <sup>h</sup> , diameter 45°, perfect; rain	1°0	0°5	—	—	43°2	24°2	—
10	Clouded all day; cir.-cum., and haze	—	—	1°0	1°0	49°1	36°1	—
11		—	1°0	0°9	—	43°8	35°9	0°16
12	Clouded till 6 <sup>h</sup> ; cum.-strat. and cir.-cum.; clear; solar halo, diameter 35°	—	—	1°0	0°9	56°0	31°2	—
13		—	0°4	0°0	0°4	0°2	36°6	24°4
14	Clouded; cir.-cum., and cir.-strat.; slight rain from 6 <sup>h</sup> to 11 <sup>h</sup>	1°0	1°0	0°3	0°0	39°3	26°9	—
15	Clear all day	0°0	0°0	0°0	0°2	45°4	29°4	—
16	Clouded from 3 <sup>h</sup> to 13 <sup>h</sup> ; cir.-strat. and haze; clear	1°0	1°0	0°4	0°0	45°7	24°3	—
17	Clear till 14 <sup>h</sup> ; clouded; cir.-strat. and haze	0°0	0°0	1°0	1°0	47°0	33°0	—
18	Clear and clouded alternately; cir.-cum. and cum.-strat.; auroral light in N. at 12 <sup>h</sup>	0°3	1°0	—	—	58°0	39°5	—
19		—	—	0°2	0°0	58°1	40°2	—
20	Clouded from 6 <sup>h</sup> to 9 <sup>h</sup> ; cir., and haze; clear	0°0	0°6	0°0	0°0	55°5	29°2	—
21	Clear to 1 <sup>h</sup> ; clouded; cir.-cum., cum.-strat., and haze; rain from 5 <sup>h</sup> to 10 <sup>h</sup>	1°0	1°0	1°0	1°0	62°8	41°8	0°06
22	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 13 <sup>h</sup> to 17 <sup>h</sup>	1°0	1°0	1°0	1°0	81°8	42°2	—
23	Clouded all day; cir.-cum., cir.-strat., and haze; rain ceased	1°0	1°0	1°0	1°0	52°8	43°7	0°07
24	Clouded all day; cir.-cum., cir.-strat., and haze; slight rain till 6 <sup>h</sup>	1°0	1°0	0°8	1°0	56°6	50°0	0°16
25	Clouded till 11 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; quite clear	—	—	1°0	1°0	56°5	40°7	—
26		—	—	0°0	0°0	46°2	41°0	—
27	Clear	0°0	0°0	0°0	1°0	54°6	36°2	—
28	Clouded; cir.-strat., cir.-cum., and haze; rain from 10 <sup>h</sup> to 16 <sup>h</sup>	1°0	1°0	1°0	1°0	59°8	36°5	0°61
29	Clouded; cir.-strat. and haze; drizzling rain from 5 <sup>h</sup> to 11 <sup>h</sup>	1°0	1°0	1°0	1°0	61°0	44°5	—
30	Clouded; cir.-cum., cir.-strat., and haze; misty	1°0	1°0	0°7	1°0	51°6	46°5	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
<b>MAY.</b>								
D.								In.
1	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 0 <sup>h</sup> to 15 <sup>h</sup> .	1'0	1'0	1'0	1'0	59'0	50'8	0'12
2	Clouded; cir.-cum., cum.-strat., and haze; auroral light at 12 <sup>h</sup> .	0'4	0'2	—	—	58'0	51'0	—
3	Clouded; cir.-cum., cum.-strat., and haze; auroral light at 12 <sup>h</sup> .	—	—	0'4	0'0	63'0	42'7	—
4	Clouded; cir.-strat. and haze; solar halo; lunar halo at 9 <sup>h</sup> , diameter 40'; auroral light in N. from 9 <sup>h</sup> to 11 <sup>h</sup> .	0'4	0'4	0'0	1'0	64'0	39'8	—
5	Clouded; cir.-cum., cir.-strat., and haze; squall, lasting only a few minutes.	1'0	1'0	1'0	0'4	67'6	40'0	—
6	Clear.	0'0	0'0	0'0	1'0	61'8	51'0	—
7	Clouded; cir., cir.-cum., and haze till 10 <sup>h</sup> ; afterwards clear.	1'0	0'7	0'3	1'0	57'5	41'3	—
8	Clouded; cir.-cum., cir.-strat., and haze; rain from 9 <sup>h</sup> to 17 <sup>h</sup> ; solar halo, diameter 35'; perfect and very bright.	1'0	1'0	1'0	1'0	57'8	47'8	0'15
9	Clouded; cir.-cum. and haze; rain.	1'0	1'0	—	—	62'4	53'9	1'10
10	Clouded; cir.-cum. and cir.-strat.; clear; auroral light at 10 <sup>h</sup> .	—	—	0'0	1'0	59'3	51'5	—
11	Clear; clouded at 15 <sup>h</sup> , 16 <sup>h</sup> , and 17 <sup>h</sup> , with cir.-cum. and haze.	0'2	0'3	1'0	0'2	57'6	39'8	—
12	Clear; clouded at 15 <sup>h</sup> , 16 <sup>h</sup> , and 17 <sup>h</sup> , with cir.-cum. and haze.	0'1	0'2	1'0	1'0	48'5	40'0	—
13	Clouded; cir.-cum. and haze; showers of rain.	1'0	1'0	1'0	0'9	64'0	38'6	0'04
14	Clouded; cir.-cum., cir.-strat., and haze; rain from 13 <sup>h</sup> to 17 <sup>h</sup> .	1'0	1'0	1'0	1'0	71'7	51'0	0'29
15	Clouded; cir.-cum. and cum.-strat.; rain.	0'8	0'4	1'0	0'8	70'5	49'8	1'65
16	Clear; clouded; cir.-cum. and haze; rain.	0'6	0'0	—	—	62'8	41'7	—
17	Clear; clouded; cir.-cum. and haze; rain.	—	—	1'0	0'4	61'0	43'0	—
18	Clouded; after part clear.	0'0	0'0	0'0	0'0	69'4	52'0	—
19	Clear.	0'0	0'2	0'0	0'0	56'0	31'9	—
20	Clear.	0'6	0'0	0'0	0'0	56'3	37'7	—
21	Clear.	0'4	0'2	0'0	0'1	66'5	31'5	—
22	Clouded; cum.-strat. and haze; thunder and lightning and rain from 9 <sup>h</sup> to 16 <sup>h</sup> .	1'0	1'0	1'0	0'4	51'6	33'1	0'27
23	Clouded; cir.-cum., cum.-strat., and haze; sheet lightning in S. and S.W.; auroral light in N. from 12 <sup>h</sup> to 16 <sup>h</sup> .	1'0	0'2	—	—	58'6	41'2	0'10
24	Clouded; cir.-cum. and haze; rain from 1 <sup>h</sup> to 2 <sup>h</sup> ; sheet lightning from 9 <sup>h</sup> to 14 <sup>h</sup> .	—	—	0'1	1'0	70'8	47'0	0'11
25	Clouded; cir.-cum. and haze; rain from 1 <sup>h</sup> to 2 <sup>h</sup> ; sheet lightning from 9 <sup>h</sup> to 14 <sup>h</sup> .	1'0	0'4	0'9	0'0	68'3	51'1	—
26	Clouded; cir.-cum.; sheet lightning from 9 <sup>h</sup> to 14 <sup>h</sup> in S.E. and S. and W.	0'6	0'4	0'2	0'6	74'3	57'0	—
27	Clouded; cir.-cum. and cum.-strat. dispersed.	0'5	0'2	0'3	0'1	77'0	56'8	—
28	Clouded; cir.-cum. and cum.-strat. dispersed.	0'6	0'3	0'2	0'0	79'7	51'8	—
29	Clouded; cir.-cum., cum.-strat., and haze; lightning, thunder, and rain from 10 <sup>h</sup> to 17 <sup>h</sup> .	1'0	1'0	1'0	1'0	73'6	51'2	0'06
30	Clouded; cir.-cum. and cum.-strat.; auroral light in N. at 10 <sup>h</sup> , 13 <sup>h</sup> , and 14 <sup>h</sup> .	0'8	0'7	—	—	71'8	59'5	0'03
31	Clouded; cir.-cum. and cum.-strat.; auroral light in N. at 10 <sup>h</sup> , 13 <sup>h</sup> , and 14 <sup>h</sup> .	—	—	0'0	1'0	74'8	51'0	—
<b>JUNE.</b>								
1	Clouded; cir.-cum., cum., and cum.-strat.; heavy showers; loud thunder.	0'9	0'7	1'0	1'0	75'3	55'7	0'18
2	Clouded; cir.-cum. and haze; rain.	0'2	0'0	0'0	1'0	74'5	60'1	0'11
3	Clouded; cir.-cum., cir.-strat., and haze; thunder and rain.	0'3	1'0	1'0	1'0	69'5	48'9	0'25
4	Clouded; cir.-cum., cir.-strat., and haze; drizzling rain; distant thunder.	1'0	1'0	1'0	1'0	72'6	59'7	0'17
5	Clouded; cir.-cum., cum., and haze; clear; rain.	1'0	0'2	0'3	0'4	71'0	53'9	0'26
6	Clouded to 5 <sup>h</sup> ; cir.-cum. and cum.; clear; slight rain.	1'0	0'0	—	—	61'3	42'5	—
7	Clear.	—	—	0'1	0'3	59'7	39'1	—
8	Clear.	0'2	0'0	0'0	0'0	61'0	42'5	—
9	Clear and unclouded.	0'0	0'0	0'0	0'0	68'5	43'5	—
10	Clouded; cir.-cum., cir., and haze; lunar halo from 12 <sup>h</sup> to 14 <sup>h</sup> .	0'0	1'0	1'0	1'0	71'1	41'5	—
11	Clouded; cir.-cum. and haze till 8 <sup>h</sup> ; hazy round horizon.	1'0	0'0	0'0	0'0	76'2	52'6	—
12	Hazy round horizon.	0'0	0'0	0'0	0'0	71'1	49'0	—
13	Clouded; cir.-cum., cir.-strat., and haze.	1'0	0'4	—	—	61'0	51'8	—
14	Clouded; cir.-cum., cir.-strat., and haze.	—	—	1'0	0'8	67'4	53'5	—
15	Clouded; cir.-cum., cir.-strat., and haze.	0'7	1'0	1'0	0'6	72'8	56'3	—
16	Clear till 17 <sup>h</sup> ; clouded; cir.-cum.; clear spaces.	0'0	0'7	0'0	0'0	78'7	56'9	—
17	Clouded; cir.-cum., cir., and haze; sheet lightning in S.S.W. and N.W. horizons from 12 <sup>h</sup> to 14 <sup>h</sup> .	0'5	0'8	1'0	0'8	70'8	49'7	—
18	Clouded; cir.-cum., cir.-strat., and haze; thunder and lightning and heavy rain.	0'9	0'3	1'0	1'0	77'6	58'9	0'78
19	Clouded; cum.-strat. and cir.-cum.; heavy rain; rainbow in E., and sheet lightning.	0'4	0'7	1'0	1'0	78'0	62'2	0'06
20	Clouded; cir.-cum. and cum.-strat.; rain.	1'0	1'0	—	—	81'0	58'9	—
21	Clouded; cir.-cum., cir.-strat., and haze; slight fall of rain.	—	—	1'0	0'4	62'5	49'7	0'12
22	Generally clear.	1'0	0'8	0'5	0'0	58'4	48'7	—
23	Clear all day.	0'0	0'0	0'0	0'0	70'0	59'2	—
24	Clear all day.	0'0	0'0	0'0	0'0	75'5	57'0	—
25	Clouded at 9 <sup>h</sup> , 15 <sup>h</sup> , and 17 <sup>h</sup> ; cir., cir.-strat., cir.-cum., and haze.	0'0	1'0	1'0	1'0	80'2	63'0	—
26	Clouded; cir., cir.-strat., and haze.	1'0	1'0	1'0	1'0	84'2	63'0	—
27	Overcast; cum., cir.-cum., cir.-strat., and haze; air oppressive.	1'0	1'0	—	—	81'0	59'5	—
28	Overcast; cum., cir.-cum., cir.-strat., and haze; air oppressive.	—	—	1'0	1'0	74'6	59'5	—
29	Clouded; cir.-strat. and haze; cum., cum.-strat., and cir.-cum.	0'1	0'0	0'0	0'1	79'2	62'1	—
30	Clear, except cir.-strat.; cir.-cum. and cum. dispersed.	0'2	0'2	0'0	0'3	78'2	62'6	—

\* Taken from the lowest reading of the Standard Thermometer.

Max. Therm.	Min. Therm.	Rain.
59°0	50°8	0°12
58°0	51°0	—
63°0	42°7	—
64°0	39°8	—
67°6	40°0	—
61°8	51°0	—
57°5	41°3	—
57°8	47°8	0°15
62°4	53°9	1°13
59°3	51°5	—
57°6	33°8	—
48°5	40°0	—
64°0	38°6	0°04
71°7	51°0	0°39
70°5	49°8	1°65
62°8	44°7	—
61°0	43°0	—
69°4	52°0	—
56°0	34°9	—
56°3	37°7	—
66°5	34°3	—
51°6	33°1	0°25
58°6	41°2	0°10
70°8	47°0	0°11
68°3	51°1	—
74°3	57°0	—
77°0	56°8	—
79°7	51°8	—
74°6	51°2	0°09
71°8	59°3	0°03
74°8	51°0	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
JULY.								
D.								In.
1	Clear till 18 <sup>h</sup> ; clouded; cum-strat. and cir-cum.	0°2	0°7	0°0	0°5	83°1	62°6	0°01
2	Clear till 18 <sup>h</sup> ; clouded; cir-cum. and cir-strat.	0°7	0°0	0°0	0°2	79°2	63°4	—
3	Clouded till 11 <sup>h</sup> ; cir-cum. cir-strat. and haze; clear	0°0	1°0	0°4	0°7	77°0	57°0	—
4	Clouded till 3 <sup>h</sup> ; cir-cum. cir-strat. and cir.; clear; sheet lightning in S. horizon at 14 <sup>h</sup>	0°8	0°2	—	—	75°8	54°2	—
5		—	—	0°2	0°0	80°1	61°5	—
6	Clouded; cir. cir-strat. and haze; solar halo, diameter 35°	0°7	1°0	0°0	0°4	86°8	61°8	—
7	Clear till 11 <sup>h</sup> ; clouded; cir-cum. and haze	0°3	0°0	1°0	0°9	82°3	55°7	—
8	Clouded till 7 <sup>h</sup> ; cir-cum. cir-strat. and haze; slight rain	0°7	0°0	0°0	0°0	78°2	55°1	0°05
9	Clear till 18 <sup>h</sup> ; clouded; cir-cum. cir-strat. and haze; distant thunder and rain	0°7	0°2	0°0	0°0	81°4	58°6	0°16
10	Clouded; cir-cum. cum-strat.; heavy squall of wind and rain and hail at 0 <sup>h</sup> and 4 <sup>h</sup> ; sheet lightning and distant thunder	0°6	1°0	1°0	0°9	81°4	67°7	0°21
11	Clouded till 12 <sup>h</sup> ; cir-cum. cir-strat. and haze; rain; distant thunder	0°8	1°0	—	—	94°6	68°0	—
12		—	—	0°0	0°2	87°6	63°8	—
13	Clear till 18 <sup>h</sup> ; clouded; cir-cum. and cir-strat.; heavy rain and sudden squall	0°8	0°9	0°0	0°8	81°8	54°9	0°04
14	Clear, except cir-cum. and cum-strat.	0°9	0°0	0°2	0°6	78°6	45°5	—
15	Clear, except cir-cum. and cum-strat.	0°7	0°2	0°0	1°0	65°7	46°0	—
16	Clouded till 1 <sup>h</sup> ; cir-cum. and cum-strat.; clear	0°2	0°0	0°2	0°1	65°3	49°1	—
17	A few clouds round horizon; cir-cum. and cum-strat.; clear	0°4	0°2	0°2	0°2	70°6	44°5	—
18	Clear to 14 <sup>h</sup> ; clouded; cir-cum. and cir-strat.	0°2	0°0	—	—	74°8	49°0	—
19		—	—	1°0	0°2	73°7	51°2	—
20	Clear; a few cir-cum. and cir-strat. round horizon	0°2	0°0	0°3	0°5	70°5	61°2	—
21	Clouded; cum-strat. and cir-cum.; a few clear spaces	0°9	0°4	0°8	1°0	79°2	57°0	—
22	Clouded; cum-strat. and cir-cum.	0°7	0°8	0°0	0°2	78°0	59°7	—
23	Clouded; cir-cum. and cir-strat.; rain from 1 <sup>h</sup> to 1 <sup>h</sup> 1/2	1°0	1°0	1°0	1°0	76°8	55°5	—
24	Clouded; cir-cum. and haze; rain; auroral light in N. at 10 <sup>h</sup>	1°0	0°0	0°0	0°0	81°8	64°8	0°94
25	Clear till 17 <sup>h</sup> ; clouded; cir-cum. and cum-strat.	1°0	0°7	—	—	72°4	61°2	—
26		—	—	0°0	0°2	81°5	60°5	—
27	Clear till 13 <sup>h</sup> ; clouded; cir-strat. and haze	0°0	0°0	0°8	0°4	78°4	59°1	—
28	Clouded; cir-cum. and cir-strat.; sheet lightning; slight rain	0°6	0°0	0°8	0°6	76°3	56°7	—
29	Clouded; cir-cum. cum. and cir-strat.; heavy rain; sheet lightning and thunder	0°7	1°0	0°4	0°4	77°0	62°4	1°49
30	Clouded; cir-cum. and cum.; clear spaces	0°6	0°9	1°0	0°5	85°0	67°7	—
31	Clear; a few cir-cum. dispersed	0°2	0°0	0°0	0°0	88°4	65°3	—
AUGUST.								
1	Generally clear	0°1	0°0	—	—	78°2 <sup>b</sup>	59°2	—
2		—	—	0°0	0°3	77°4	53°5	—
3	Generally clear	0°0	0°0	0°0	0°0	78°4	56°5	—
4	Clouded from 13 <sup>h</sup> to 1 <sup>h</sup> 1/2; afterwards clear	0°0	0°0	1°0	0°0	81°8	58°5	—
5	Clear till 3 <sup>h</sup> ; clouded; cir-cum. cir-strat. and haze	0°2	1°0	1°0	0°0	85°4	65°0	—
6	Clear to 14 <sup>h</sup> ; clouded; cir. cir-strat. and haze	0°2	1°0	1°0	1°0	86°4	61°4	—
7	Clouded all day; cir. cir-cum. and haze	1°0	1°0	1°0	1°0	83°0	62°0	—
8	Clouded till 11 <sup>h</sup> ; cir-cum. cir-strat. and haze; rain at intervals; vivid lightning; thunder	1°0	1°0	—	—	82°6	65°8	0°21
9		—	—	0°0	0°9	74°5	67°0	0°06
10	Clouded; cir-cum. and haze till 4 <sup>h</sup> ; clear	0°7	0°0	0°0	0°0	71°6	62°5	—
11	Generally clear	0°0	0°0	0°7	0°5	78°6	53°2	—
12	Clouded; cir-cum. cum-strat. and haze	0°0	0°0	1°0	0°9	73°7	52°7	—
13	Clouded; cir-cum. cum. and haze; heavy shower of rain; lightning and thunder; auroral light in N.; lunar halo at 15 <sup>h</sup>	1°0	0°5	0°6	0°3	81°6	66°0	0°32
14	Clouded; cir. and cir-cum. dispersed; clear	0°4	0°0	0°0	0°0	84°8	61°5	—
15	Clear; sheet lightning; auroral light in N. at 15 <sup>h</sup> and 15 <sup>h</sup>	0°0	0°0	—	—	79°6	57°8	—
16		—	—	0°0	0°0	82°6	67°6	0°55
17	Generally clear	0°4	0°0	0°0	0°6	68°3	59°5	—
18	Clear, except cir-cum. and cir-strat. dispersed round horizon	0°2	0°0	0°3	1°0	72°8	49°5	—
19	Clouded; cir-cum. cir-strat. and haze	1°0	1°0	1°0	1°0	65°7	49°6	—
20	Clouded; cir-cum. cir-strat. and haze; rain	1°0	0°8	0°4	0°5	69°0	61°8	0°39
21	Generally clouded; cir-cum.; cir-strat.; a few clear spaces	0°7	0°8	0°8	1°0	69°0	57°3	—
22	Clouded; cir-cum. cir-strat. and haze; rain; cleared up	1°0	0°8	—	—	74°4	62°4	—
23		—	—	0°0	0°0	73°9	56°0	—
24	Unclouded	0°0	0°0	0°0	0°0	77°7	55°9	—
25	Unclouded	0°1	0°0	0°0	0°6	69°7	52°0	—
26	Partially clouded; cir. and cir-strat. to 7 <sup>h</sup> ; clear	0°7	0°0	0°0	0°5	73°7	55°9	—
27	Clouded; cir-cum. and cir-strat.; solar halo; lightning, thunder, and rain from 13 <sup>h</sup> to 16 <sup>h</sup>	1°0	0°5	1°0	1°0	72°2	57°7	0°01
28	Clouded; cum-strat. and cir-cum.; aurora at 10 <sup>h</sup> ; sheet lightning	0°4	0°2	0°0	0°6	76°3	61°0	0°06
29	Clouded; cir. cir-strat. and haze; storm, lightning, thunder, and rain, from 0 <sup>h</sup> to 3 <sup>h</sup>	1°0	0°8	—	—	77°2	59°7	0°16
30		—	—	0°0	0°0	77°0	58°5	—
31	Generally clear	0°2	0°0	0°0	0°0	78°6	60°5	—

<sup>a</sup> Taken from the highest reading of the Standard Thermometer. <sup>b</sup> The Max. Therm. for this month are the highest readings of the Standard Thermometer.

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sk.				Max. Therm.	m. m.	Halt.
		4	9	15	21			
SEPTEMBER.								
1	Clouded till 17 <sup>h</sup> ; cir.-cum. and cir.-strat.; clear	0'1	0'0	0'8	0'0	81'2	60'5	—
2	Clouded; cir.-cum. and haze	1'0	1'0	1'0	1'0	81'3	65'0	—
3	Clouded all day; cir.-cum., cum.-strat., and haze; rain	1'0	1'0	1'0	1'0	82'2	69'0	0'01
4	Clouded; cir.-cum., cum.-strat., and cum.; rain	0'9	0'3	0'8	0'8	74'8	66'8	0'01
5	Clouded; cir.-cum., and cum.-strat.	1'0	0'0	—	—	78'2	70'0	—
6		—	—	0'3	0'3	79'6	60'0	—
7	Clouded; cir.-cum., cum.-strat., and cum.; squalls, lightning, thunder, and slight rain	0'1	1'0	1'0	0'3	71'1	64'8	0'01
8	Clouded; cir.-cum. and cum. till 6 <sup>h</sup> ; clear	0'8	0'0	0'2	0'4	83'4	60'0	—
9	Clear till 12 <sup>h</sup> ; clouded; cir.-strat. and cir.-cum.	0'1	0'0	0'6	0'0	70'5	51'2	—
10	Clouded; cir.-cum. and cir.-strat.; clear	0'2	—	1'0	0'8	65'5	57'7	—
11	Clouded; cir.-cum. and cir.-strat.; distant thunder; sheet lightning; auroral light in N. from 9 <sup>h</sup> to 11 <sup>h</sup>	1'0	0'0	0'6	0'6	68'4	58'5	—
12	Clouded; cir.-cum., cir.-strat., and haze; lightning, thunder, and rain; auroral light in N. from 8 <sup>h</sup> to 11 <sup>h</sup>	0'1	0'0	—	—	78'8	66'1	0'28
13	—	—	—	0'4	0'3	79'6	60'3	—
14	Clouded till 12 <sup>h</sup> ; cir.-cum., cum.-strat., and haze; lightning, thunder, and rain	0'8	0'5	0'0	0'0	79'6	64'0	0'05
15	Clear all day	0'0	0'0	0'0	0'0	82'2	51'7	—
16	Clouded; cir.-cum., cum.-strat., and haze; auroral light in N. at 11 <sup>h</sup>	0'8	0'0	1'0	1'0	66'4	44'1	—
17	Clouded all day; cir.-strat., cir., and haze; rain	1'0	1'0	1'0	0'2	66'0	52'0	0'10
18	Clouded; cir.-cum. and cum.-strat.; clear	0'3	0'0	0'0	0'0	63'6	56'2	—
19	Clouded; cir.-cum. and cum.-strat.; rain	0'6	0'0	—	—	67'4	46'2	—
20		—	—	0'9	1'0	72'6	46'8	0'31
21	Clouded; cir.-cum. and cum.-strat.; clear, brilliant aurora from 9 <sup>h</sup> to 17 <sup>h</sup>	0'2	0'0	0'0	0'0	70'7	51'2	—
22	Generally clear; auroral light in N. from 13 <sup>h</sup> to 15 <sup>h</sup>	0'0	0'0	0'0	0'1	61'0	38'3	—
23	Generally clear; sheet lightning and thunder from 7 <sup>h</sup> to 13 <sup>h</sup>	0'0	0'0	0'1	1'0	61'8	43'6	—
24	Clouded; cir.-cum. and cum.-strat.; rain greater part of day	1'0	1'0	1'0	1'0	72'8	59'2	0'25
25	Clouded; cir.-cum. and haze; rain ceased at 8 <sup>h</sup>	1'0	1'0	0'0	0'0	65'8	49'0	1'80
26	Clear to 17 <sup>h</sup> ; clouded; cir.-cum. and cum.-strat.	0'8	0'0	—	—	57'0	42'9	0'07
27		—	—	0'0	0'0	61'3	45'7	0'14
28	Clouded; cir.-cum. and cir.-strat.	0'1	0'6	1'0	0'4	55'2	37'3	—
29	Clouded; cir.-cum. and cir.-strat.	0'7	0'1	0'7	0'0	59'2	51'2	—
30	Clouded; cir.-cum., cir.-strat., and haze	0'0	1'0	0'0	1'0	67'9	54'9	—
OCTOBER.								
1	Clouded; cum.-strat., cir.-strat., and cir.-cum.; rain at 7 <sup>h</sup> and 12 <sup>h</sup>	1'0	1'0	1'0	1'0	69'5	50'0	0'07
2	Clouded; cir.-cum. and haze; rain; auroral light in N. at 8 <sup>h</sup> and 9 <sup>h</sup>	0'3	0'1	0'1	0'4	54'2	45'0	—
3	Clouded; cir.-cum. and cum.-strat.; lunar halo at 8 <sup>h</sup> and 9 <sup>h</sup>	0'6	1'0	—	—	51'6	37'5	—
4		—	—	1'0	0'0	55'6	41'7	—
5	Clear all day	0'0	0'0	0'0	0'0	55'5	40'3	—
6	Clear from 13 <sup>h</sup> to 17 <sup>h</sup> ; clouded; detached cir.-cum.	0'5	0'7	0'0	0'0	65'9	39'5	—
7	Clouded; cir.-cum. and haze; sheet lightning and rain from 7 <sup>h</sup> to 12 <sup>h</sup>	0'8	1'0	0'9	1'0	64'0	49'2	0'25
8	Clouded; cum.-strat., cir.-cum., and haze; rain, thunder, and lightning	1'0	1'0	1'0	0'8	69'2	59'9	0'16
9	Clouded till 8 <sup>h</sup> ; cum.-strat. and cir.-cum.; rain; aurora from 11 <sup>h</sup> to 15 <sup>h</sup>	1'0	0'0	0'0	1'0	64'4	56'8	—
10	Generally clear; aurora from 14 <sup>h</sup> to 16 <sup>h</sup>	0'4	0'0	—	—	70'1	36'1	—
11		—	—	0'0	0'0	48'4	35'0	—
12	Clouded; cir.-cum., cir.-strat., and haze; rain from 6 <sup>h</sup> to 17 <sup>h</sup>	0'7	1'0	1'0	1'0	53'1	46'3	0'05
13	Clouded; cir.-cum., cir.-strat., and haze; rain	1'0	0'9	0'0	1'0	62'8	46'9	—
14	Clouded; cum.-strat., cir.-cum., and haze; rain	0'6	1'0	0'5	0'7	49'1	33'9	—
15	Clouded; cir.-cum. and cir.-strat.; rain	0'8	1'0	1'0	1'0	52'0	36'1	0'05
16	Clouded; cir.-cum., cir.-strat., and haze; rain, lightning, and thunder	1'0	1'0	1'0	1'0	50'2	38'1	0'17
17	Clouded; cir.-cum., cir.-strat., and haze; snow	1'0	0'2	—	—	58'6	32'7	—
18		—	—	1'0	0'6	36'2	23'1	—
19	Clouded; cir.-cum., cir., and haze; auroral light; rain	1'0	0'6	1'0	1'0	41'1	30'6	—
20	Clouded; cir.-cum. and haze; clear after part of day	0'8	0'1	0'0	1'0	48'2	41'3	—
21	Clouded; cir.-cum., cir.-strat., and haze; a few clear spaces	1'0	0'3	1'0	1'0	48'4	30'0	—
22	Clouded; cir.-cum. and haze; clear	0'8	0'6	0'6	1'0	43'5	36'9	—
23	Clouded; cum.-strat., cir.-cum., and haze; clear	1'0	0'2	0'1	0'9	37'4	20'7	—
24	Clouded; cir.-cum. and haze; clear	0'4	0'2	—	—	45'0	32'7	—
25		—	—	0'0	1'0	46'2	27'2	—
26	Clouded all day; cir.-cum. and haze; rain from 10 <sup>h</sup> to 14 <sup>h</sup>	0'9	1'0	1'0	1'0	48'4	31'8	—
27	Clouded; cir.-cum. and haze; rain	0'8	0'9	0'6	1'0	53'4	47'1	—
28	Clouded; cir.-cum., cum.-strat., and haze	0'1	1'0	1'0	0'7	51'0	28'4	—
29	Clouded; cir.-cum. and haze	1'0	1'0	1'0	1'0	39'8	28'3	—
30	Clouded; cum.-strat. and cir.-cum. till 11 <sup>h</sup> ; clear	1'0	1'0	0'4	1'0	47'4	33'7	—
31	Clouded; cir.-cum., cir.-strat., and haze; rain	1'0	1'0	—	—	39'2	30'6	0'54
Nov. 1		—	—	1'0	1'0	40'6	31'3	—

21	Max. Therm.	Min. Therm.	Rain.
0°0	81°2	60°5	—
1°0	84°3	65°0	—
1°0	82°2	69°0	—
0°8	74°8	66°8	—
—	78°2	70°0	—
0°3	79°6	60°0	—
0°3	74°1	64°8	0°01
0°4	83°4	60°0	—
0°0	70°5	51°2	—
0°8	65°5	57°7	—
0°6	68°4	58°5	—
—	78°8	66°1	0°28
0°3	79°6	60°3	—
0°0	79°6	64°0	0°05
0°0	82°2	51°7	—
1°0	66°4	44°1	—
0°2	66°0	52°0	0°10
0°0	63°6	56°2	—
—	67°4	46°2	—
1°0	72°6	46°8	0°31
0°0	70°7	51°2	—
0°1	61°0	38°3	—
1°0	64°8	43°6	—
1°0	72°8	59°2	0°25
0°0	65°8	49°0	1°80
—	57°0	42°9	0°07
0°0	61°3	45°7	0°14
0°4	55°2	37°3	—
0°0	39°2	51°2	—
1°0	67°9	54°9	—
1°0	69°5	50°0	0°07
0°4	54°2	45°0	—
—	51°6	37°5	—
0°0	55°6	41°7	—
0°0	55°5	40°3	—
0°0	65°9	39°5	—
1°0	64°0	49°2	0°25
0°8	69°2	59°9	0°16
1°0	64°4	56°8	—
—	70°1	36°1	—
0°0	48°4	35°0	—
1°0	53°1	46°3	0°05
1°0	62°8	46°9	—
0°7	49°1	33°9	—
1°0	52°0	36°1	0°05
1°0	50°2	38°4	0°17
—	58°6	32°7	—
0°6	36°2	23°1	—
1°0	41°1	30°6	—
1°0	48°2	41°3	—
1°0	48°4	30°0	—
1°0	43°5	36°9	—
0°9	37°4	20°7	—
—	43°0	32°7	—
1°0	46°2	27°2	—
1°0	48°4	31°8	—
1°0	53°4	47°1	—
0°7	51°0	28°4	—
1°0	39°8	28°3	—
1°0	47°4	33°7	—
—	39°2	30°6	0°54
1°0	40°6	31°3	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
NOVEMBER.								
1	Clouded; cir-cum. and cir-strat.; rain at intervals	1°0	1°0	0°4	1°0	49°0	43°3	0°29
2	Clouded all day; cir-cum. and cum-strat.	1°0	1°0	1°0	0°4	53°3	41°2	—
3	Clear	0°0	0°0	0°0	0°0	53°1	40°5	—
4	Clear all day	0°0	0°0	0°0	1°0	53°0	35°7	—
5	Clear	0°1	0°0	0°0	0°7	50°0	29°7	—
6	Clear	1°0	1°0	—	—	50°4	34°1	—
7	Clouded; cir-cum. and cir-strat.; raining most part of the day	—	—	1°0	1°0	50°9	48°7	1°45
8	Clouded all day; cir-cum. cir. and haze; thick fog	1°0	1°0	1°0	1°0	51°2	45°3	—
9	Clouded; cir-cum. cir-strat. and haze; slight rain	1°0	1°0	1°0	1°0	51°4	49°5	0°10
10	Clouded; cir-cum. cir-strat. and haze; rain most part of the day	1°0	1°0	1°0	1°0	55°6	50°5	0°45
11	Clouded; cir-cum. cir-strat. and haze	1°0	1°0	1°0	1°0	62°6	45°0	—
12	Clouded all day; cir-cum. cir-strat. and haze; slight rain	1°0	1°0	1°0	1°0	48°6	45°5	—
13	Clouded; cir-cum. cir-strat. and haze; slight rain	0°1	1°0	—	—	46°8	41°8	—
14	Clouded; cir-cum. cir-strat. and haze; slight rain	—	—	1°0	1°0	47°2	42°6	0°70
15	Clouded till 11 <sup>h</sup> ; cir-cum. and cir-strat.; clear	1°0	0°8	0°2	0°6	45°4	41°2	—
16	Clouded; cir-cum. cir-strat. and haze; showers	1°0	1°0	0°0	1°0	48°0	39°0	—
17	Clouded all day; cir-cum. cir-strat. and haze; rain	1°0	1°0	1°0	1°0	49°2	41°7	0°08
18	Clouded all day; rain	1°0	1°0	1°0	1°0	54°0	39°8	1°32
19	Clouded; cir-cum. and cum-strat.; a few clear spaces	0°7	0°3	1°0	1°0	41°6	31°6	—
20	Clouded; cir-cum. and cir-strat.; slight rain at 9 <sup>h</sup> and 11 <sup>h</sup>	1°0	1°0	—	—	43°0	33°4	—
21	Clouded; cir-cum. cir-strat. and haze; sleet and rain	1°0	1°0	1°0	0°5	45°4	32°3	—
22	Clouded; cir-cum. and cir-strat.; snow; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup>	0°8	0°2	1°0	1°0	37°0	32°1	—
23	Clouded; cir-cum. cir-strat. and haze; snow; lunar halo, diameter about 45°	1°0	0°1	1°0	0°2	43°0	19°3	0°03
24	Clouded; cir-cum. and haze; a few particles of snow	1°0	0°4	1°0	1°0	25°0	18°0	—
25	Clouded; cum-strat. cir-cum. and haze; rain from 10 <sup>h</sup> to 15 <sup>h</sup>	1°0	1°0	1°0	1°0	28°6	22°0	0°05
26	Clouded; cir-strat. and haze; imperfect halo round the moon at 5 <sup>h</sup>	0°2	1°0	—	—	36°6	29°5	—
27	Clouded; cir-cum. and haze till 8 <sup>h</sup> ; clear at 9 <sup>h</sup> and 15 <sup>h</sup>	1°0	0°0	0°0	1°0	43°3	26°0	—
28	Clouded; cir-cum. and haze till 8 <sup>h</sup> ; clear at 9 <sup>h</sup> and 15 <sup>h</sup>	1°0	0°0	0°0	1°0	36°6	24°7	—
DECEMBER.								
1	Clouded all day; cir-cum. and haze; rain from 14 <sup>h</sup> to 17 <sup>h</sup>	1°0	1°0	1°0	1°0	28°8	13°3	—
2	In general clouded; cir-cum. cir-strat. and haze; rain	1°0	1°0	1°0	1°0	32°8	24°7	0°49
3	Generally clouded; cir-cum. and cum-strat.; particles of snow	1°0	1°0	0°1	0°1	49°2	33°1	—
4	Clouded; cir-cum. and cum-strat.	1°0	1°0	1°0	1°0	33°7	25°0	—
5	Clouded; cir-cum. cir. and haze; lunar halo, diameter 40°, perfect	1°0	1°0	—	—	34°0	29°1	—
6	Clouded; cir-cum. cir-strat. and haze; lunar halo, diameter 40°, perfect	—	—	1°0	1°0	34°0	23°1	—
7	Clouded all day; cir-cum. cir-strat. and haze; rain from 8 <sup>h</sup> to 13 <sup>h</sup>	1°0	1°0	1°0	1°0	33°6	23°5	0°50
8	Clouded; cir-cum. cum-strat. and haze	1°0	1°0	0°8	1°0	39°9	34°6	—
9	Clouded; cir-cum. cum-strat. cir-strat. and haze	1°0	1°0	1°0	1°0	37°4	30°9	—
10	Clouded; cir-cum. cum-strat. and haze; snow	1°0	1°0	1°0	0°6	32°4	28°1	—
11	Clouded; cir-cum. cum-strat. and haze; at intervals nearly clear, then suddenly clouded	1°0	1°0	0°1	1°0	31°8	23°2	—
12	Clouded till 12 <sup>h</sup> ; cum-strat. cir-cum. and haze; slight snow	0°7	1°0	—	—	29°2	16°1	—
13	Clear; strat. in horizon	0°0	0°0	0°0	0°1	21°6	16°0	—
14	Clear; strat. in horizon	0°0	0°0	0°0	0°0	20°0	11°2	—
15	Clear; strat. in horizon	0°0	0°0	0°2	0°3	23°0	7°9	—
16	Clear greater part of day; clouded at 21 <sup>h</sup>	1°0	0°0	0°7	1°0	26°9	10°9	—
17	Clouded till 4 <sup>h</sup> ; cum-strat. cir-strat. and haze; clear	0°6	0°0	0°0	0°2	27°8	21°3	—
18	Clouded; cum-strat. cir-strat. and haze	1°0	1°0	1°0	1°0	27°4	12°5	—
19	Clouded till 14 <sup>h</sup> ; cir-cum. and haze; clear	1°0	1°0	—	—	30°2	25°0	—
20	Clear till 9 <sup>h</sup> ; clouded; cir-cum. and haze; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	—	—	0°3	0°1	32°8	23°7	—
21	Clear till 9 <sup>h</sup> ; clouded; cir-cum. and haze; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	0°0	0°0	1°0	1°0	29°6	18°9	—
22	Clouded till 11 <sup>h</sup> ; cum-strat. cir-cum. and haze; clear; snow at 9 <sup>h</sup> and 10 <sup>h</sup>	1°0	1°0	0°0	0°0	27°5	13°4	—
23	Clear to 12 <sup>h</sup> ; clouded; cir-cum. and haze; auroral light in N. at 10 <sup>h</sup> and 11 <sup>h</sup>	0°4	0°4	1°0	1°0	25°8	3°9	—
24	Clouded; cir-cum. cir-strat. and haze; rain on Christmas Day	1°0	1°0	—	—	35°6	12°4	—
25	Clouded all day; cir-cum. cir-strat. and haze	1°0	1°0	—	—	36°0	14°9	0°14
26	Clouded all day; cir-cum. cir-strat. and haze	1°0	1°0	—	—	35°4	29°7	—
27	Clouded all day; cir-cum. cir-strat. and haze	1°0	0°0	1°0	1°0	49°1	31°0	—
28	Clouded all day; cir-cum. cir-strat. and haze	1°0	1°0	1°0	1°0	35°4	18°3	0°05
29	Clouded all day; cir-cum. and haze; slight rain	1°0	1°0	1°0	1°0	35°4	27°7	0°05
30	Clouded all day; cum-strat. cir-cum. and haze; rain	1°0	1°0	1°0	1°0	39°9	33°2	0°25

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
<b>JANUARY.</b>								
D.						°	°	in.
1	Clouded all day; cir-cum. and haze; rain from 3 <sup>h</sup> to 11 <sup>h</sup>	1'0	1'0	1'0	1'0	40'1	34'7	0'40
2	Clouded; dense cir-cum., cir., and haze; lunar halo, diameter 40 <sup>h</sup> , bright and perfect	1'0	1'0	—	—	36'0	31'9	—
3	Clouded to 18 <sup>h</sup> ; cir-cum., cir-strat., and haze; rain and sleet; remainder clear	—	—	1'0	1'0	36'7	32'1	—
4	Partly clouded; cir. and cir-cum.; lunar halo, diameter 35 <sup>h</sup> , perfect	1'0	1'0	1'0	0'1	35'6	24'3	1'10
5	Clouded all day; cir-cum., cir-strat., and haze; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	0'9	0'2	1'0	1'0	41'8	32'9	—
6	Clouded all day; cir-cum., cir-strat., and haze; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	1'0	1'0	1'0	1'0	37'6	28'9	—
7	Clouded to 8 <sup>h</sup> ; cir-cum. and cum-strat.; snow; remainder partly clear	1'0	0'1	0'3	0'3	33'6	24'1	—
8	Clouded; cir-cum., cum-strat., and haze	1'0	0'2	1'0	1'0	28'8	7'5	—
9	Clouded till 11 <sup>h</sup> ; cir-cum., cir-strat., and haze; clear	0'9	1'0	—	—	11'4	9'1	—
10	Clouded till 11 <sup>h</sup> ; cir-cum., cir-strat., and haze; clear	—	—	0'0	0'1	20'1	9'3	—
11	Clouded to 6 <sup>h</sup> and at 21 <sup>h</sup> ; cir-strat. and haze; clear	1'0	0'0	0'0	1'0	16'2	2'7	—
12	Clouded from 13 <sup>h</sup> to 23 <sup>h</sup> ; cir-cum., cir-strat., and haze; remainder of the day clear	0'1	0'0	1'0	1'0	11'9	11'1	—
13	Clouded; cir-cum., cir-strat., and haze; clear from 5 <sup>h</sup> to 11 <sup>h</sup>	1'0	0'0	1'0	1'0	23'9	12'4	—
14	Clouded all day; cir-cum., cum-strat., and cir-strat.; rain	1'0	1'0	1'0	1'0	35'4	31'7	—
15	Clouded all day; cum-strat. and cir-cum.; rain; sheet lightning in S.W.	1'0	1'0	1'0	1'0	39'7	33'9	0'11
16	Clouded; cir-cum. and cum-strat.; snow; clear from 7 <sup>h</sup> to 12 <sup>h</sup>	0'3	0'0	—	—	32'4	31'8	—
17	Clouded; cir-cum., cir-strat., and haze	—	—	1'0	1'0	35'4	3'1	—
18	Clouded; cir-cum., cir-strat., and haze	1'0	1'0	0'6	0'3	28'2	10'8	—
19	Clear; some cir-cum. and cum-strat. dispersed	0'3	0'0	0'0	0'0	31'5	9'2	—
20	Clear; cir.; lunar halo at 6 <sup>h</sup> and 7 <sup>h</sup>	0'5	0'2	0'0	0'1	11'8	6'2	—
21	Partly clouded; cir-cum., cir-strat., and haze; showers of snow	0'6	0'0	0'0	0'8	21'3	10'0	—
22	Clouded; cir-cum., cir-strat., and haze; halo and parhelia round the sun at 3 <sup>h</sup>	1'0	1'0	0'1	0'3	14'2	3'1	—
23	Partly clouded; cir-cum., cir-strat., and haze	0'5	0'1	—	—	22'0	11'9	—
24	Partly clouded; cir-cum., cir-strat., and haze	—	—	1'0	0'6	32'6	21'2	—
25	Generally clouded; cir-cum. and cir-strat.; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	1'0	1'0	1'0	1'0	27'8	15'9	—
26	Clouded; cir-cum., cum-strat., and haze; rain	0'9	1'0	1'0	1'0	28'0	24'6	0'25
27	Nearly clear; cir-cum. and haze	0'1	0'0	0'0	1'0	33'8	12'7	—
28	In general clouded; cir-cum., cir., and haz	1'0	0'3	1'0	1'0	16'0	2'9	—
29	Clouded all day; cir-cum. and haze; slight snow	1'0	1'0	1'0	1'0	22'3	16'3	—
30	Clouded all day; cir-cum., cir-strat., and haze; lunar halo at 8 <sup>h</sup> , diameter about 35 <sup>h</sup>	1'0	0'9	—	—	32'4	17'4	—
31	Clouded all day; cir-cum., cir-strat., and haze; lunar halo at 8 <sup>h</sup> , diameter about 35 <sup>h</sup>	—	—	1'0	1'0	22'0	2'9	—
<b>FEBRUARY.</b>								
1	Generally clouded; cir-cum., cum-strat., and haze	1'0	1'0	1'0	0'6	24'0	6'1	—
2	Mostly clouded; cir-strat., cir., and haze; rain at 11 <sup>h</sup> and 12 <sup>h</sup>	0'5	1'0	1'0	1'0	32'4	23'1	—
3	Clouded from 3 <sup>h</sup> to 15 <sup>h</sup> ; cir-cum. and haze; snow from 1 <sup>h</sup> to 15 <sup>h</sup> ; clear	1'0	1'0	0'9	0'1	40'9	37'1	0'55
4	Generally clear	0'0	0'0	0'0	0'0	47'6	12'2	—
5	Clouded from 2 <sup>h</sup> to 14 <sup>h</sup> ; cir-cum. and cir-strat.; remainder of the day clear	1'0	0'5	0'0	0'0	23'1	8'1	—
6	Clear to 11 <sup>h</sup> ; remainder of the day clouded; cir-cum. and haze	0'0	0'0	—	—	21'4	11'1	—
7	Clear to 11 <sup>h</sup> ; remainder of the day clouded; cir-cum. and haze	—	—	1'0	0'8	27'8	17'7	—
8	Mostly clouded; cir-cum., cir-strat., and haze; snow from 10 <sup>h</sup> to 11 <sup>h</sup>	1'0	1'0	1'0	0'3	29'0	19'1	—
9	Generally clouded; cum-strat. and cir-cum.	1'0	1'0	1'0	1'0	35'4	26'6	—
10	Mostly clouded; cir-cum. and cum-strat.; snow at intervals	1'0	0'2	1'0	1'0	32'2	10'9	—
11	Mostly clouded; cum-strat. and cir-cum.; snow from 11 <sup>h</sup> to 15 <sup>h</sup>	1'0	1'0	1'0	0'2	35'0	10'8	—
12	Generally clouded; cum-strat., cir-cum., and haze; some snow	0'8	1'0	1'0	1'0	21'8	10'9	—
13	Clouded all day; cir-cum. and cum-strat.; snow from 12 <sup>h</sup> to 15 <sup>h</sup>	1'0	1'0	—	—	26'1	7'8	—
14	Clouded all day; cir-cum. and cum-strat.; snow from 12 <sup>h</sup> to 15 <sup>h</sup>	—	—	1'0	1'0	25'2	16'8	—
15	Mostly clouded; cir-cum., cum-strat., cir-strat., and haze; snow at 16 <sup>h</sup> and 17 <sup>h</sup>	0'9	0'1	1'0	1'0	29'6	22'5	—
16	Clouded all day; cir-cum. and haze; snow; hail; rain from 19 <sup>h</sup> to 23 <sup>h</sup>	1'0	1'0	1'0	1'0	29'2	11'1	—
17	Clouded at 4 <sup>h</sup> and from 10 <sup>h</sup> to 23 <sup>h</sup> ; cum-strat. and cir-cum.; remainder of the day clear	1'0	0'0	0'0	1'0	24'0	13'4	—
18	Clouded all day; cir-cum., cir-strat., and haze	1'0	1'0	1'0	1'0	31'9	13'1	—
19	Clouded all day; cir-strat., cir-cum., and haze; snow occasionally	1'0	1'0	1'0	1'0	31'2	26'3	—
20	Clouded all day; cum-strat. and haze; snow nearly all day	1'0	1'0	—	—	32'3	22'1	—
21	Clouded all day; cum-strat. and haze; snow nearly all day	—	—	1'0	1'0	26'0	15'1	—
22	Clouded till 5 <sup>h</sup> ; cir-cum. and haze; slight snow; remainder of the day clear; auroral light in N. from 3 <sup>h</sup> to 13 <sup>h</sup>	1'0	0'8	0'0	0'0	20'8	11'7	—
23	Clear till 20 <sup>h</sup>	0'0	0'0	0'0	0'3	20'0	0'0	—
24	Generally clouded; cir-cum. and haze; snow from 17 <sup>h</sup> to 17 <sup>h</sup>	0'7	1'0	1'0	0'8	17'8	0'9	—
25	Generally clear	0'1	0'0	0'0	0'1	22'4	15'7	—
26	Clouded all day; cir-cum. and haze; snow from 11 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	1'0	1'0	25'9	7'0	—
27	Clouded all day; cir-cum. and haze; snow from 5 <sup>h</sup>	1'0	1'0	—	—	27'9	25'3	—
28	Clouded all day; cir-cum. and haze; snow from 5 <sup>h</sup>	—	—	1'0	0'7	33'0	26'1	—

21	Max. Therm.	Min. Therm.	RAIN.
	•	•	In.
1'0	40'1	34'7	0'40
—	36'0	31'9	—
1'0	36'7	32'1	—
0'1	35'6	24'3	1'10
1'0	41'8	32'9	—
1'0	37'6	28'9	—
0'3	33'6	24'1	—
1'0	28'8	7'5	—
—	11'4	9'1	—
0'1	20'1	9'3	—
1'0	16'2	2'7	—
1'0	11'9	11'1	—
1'0	13'9	12'4	—
1'0	35'4	31'7	—
1'0	36'7	33'9	0'14
—	32'4	31'8	—
1'0	35'4	3'1	—
0'3	28'2	10'8	—
0'0	34'5	9'2	—
0'4	11'8	6'2	—
0'8	21'3	10'6	—
0'3	14'2	3'1	—
—	22'0	11'9	—
0'6	32'6	17'2	—
1'0	27'8	15'9	—
1'0	28'0	24'6	0'25
1'0	33'8	12'7	—
1'0	16'0	2'9	—
1'0	22'3	16'3	—
—	32'1	17'4	—
1'0	22'0	2'9	—
0'6	24'0	6'1	—
1'0	32'1	23'1	—
0'1	10'9	37'1	0'55
0'0	37'6	12'2	—
0'0	23'1	8'1	—
—	21'4	11'1	—
0'8	27'8	17'7	—
0'3	29'0	19'1	—
1'0	35'4	26'6	—
1'0	32'2	20'9	—
0'2	35'0	10'8	—
1'0	21'8	10'9	—
—	26'1	7'8	—
1'0	25'2	16'8	—
1'0	29'6	22'5	—
1'0	29'2	11'1	—
1'0	31'0	13'4	—
1'0	31'9	13'1	—
1'0	31'2	26'3	—
—	32'3	22'1	—
1'0	26'0	15'1	—
0'0	20'8	14'7	—
0'3	20'0	0'0	—
0'8	17'8	0'9	—
0'1	22'4	15'7	—
1'0	25'9	7'0	—
—	27'9	25'3	—
0'7	33'0	26'1	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	RAIN.
		3	9	15	21			
<b>MARCH.</b>								
1	Generally clouded; cir-cum. and cum-strat.; light snow	1'0	1'0	1'0	0'2	28'3	19'2	—
2	Generally clouded; cir-cum. and cum-strat.	0'4	1'0	1'0	1'0	29'0	18'2	—
3	Clouded till 8 <sup>h</sup> ; cir., cir-cum. and cum-strat.; remainder of the day clear	0'8	0'0	0'0	0'1	30'2	20'3	—
4	Clouded till 11 <sup>h</sup> ; cir-cum., cir-strat., and haze; remainder of the day mostly clear	0'8	0'5	0'0	0'1	35'2	12'0	—
5	Clear to 4 <sup>h</sup> ; remainder of the day clouded; cir-cum., cir-strat., and cum-strat.	0'1	1'0	1'0	1'0	32'5	10'2	—
6	Clouded till 7 <sup>h</sup> ; cir-cum., cir., and haze; remainder of the day nearly clear; halos and	1'0	0'2	—	—	30'3	23'9	—
7	parhelia round the sun at 4 p.m. of 6 <sup>h</sup>	—	—	0'0	0'0	35'7	32'1	0'10
8	Clear to 12 <sup>h</sup> ; overcast; cir. and haze	0'0	0'0	1'0	0'8	38'3	24'4	—
9	Clouded all day; cir-cum., cum-strat., and haze	1'0	1'0	1'0	1'0	35'4	18'3	—
10	Nearly clear to 20 <sup>h</sup> ; remainder of the day clouded; cir-cum., cir-strat., and haze	0'0	0'0	0'2	1'0	25'3	20'8	—
11	Clouded to 6 <sup>h</sup> ; cum-strat., cir-cum., and haze; clear	1'0	0'0	0'0	0'1	36'3	14'7	—
12	Generally clear; clouded from 5 <sup>h</sup> to 11 <sup>h</sup> ; cir-cum. and haze	0'1	0'8	0'0	0'0	22'3	5'6	—
13	Clear to 12 <sup>h</sup> ; remainder overcast; cir-cum. and haze	0'0	0'0	—	—	23'1	10'5	—
14	—	—	—	1'0	0'1	26'5	7'9	—
15	Mostly clear; some cir-cum. round horizon	0'4	0'0	0'0	0'4	30'3	7'2	—
16	Partly clouded to 5 <sup>h</sup> ; cir-cum., cum-strat., and haze; remainder quite clear	1'0	0'0	0'0	0'0	24'1	10'5	—
17	Clear to 2 <sup>h</sup> ; remainder clouded; cir., cir-strat., and haze; solar halo at 3 <sup>h</sup> , diameter 25 <sup>h</sup>	0'4	0'8	0'9	1'0	23'7	12'5	—
18	Clear all day	0'0	0'0	0'0	0'0	34'3	26'5	—
19	Clear to 1 <sup>h</sup> ; remainder of the day clouded; cir-cum. and haze; brilliant aurora at night; lightning at 15 <sup>h</sup> in S.S.W.	0'7	0'0	1'0	1'0	42'3	21'1	—
20	Clouded all day; cir-cum., cir-strat., and haze; slight rain most of the day	1'0	1'0	—	—	36'5	25'1	0'55
21	—	—	—	1'0	1'0	39'2	18'9	—
22	Clouded all day; cir-cum. and haze; slight rain	1'0	1'0	1'0	1'0	30'7	23'2	0'20
23	Generally clouded; cir-cum. and haze; snow from 8 <sup>h</sup> to 11 <sup>h</sup>	1'0	1'0	1'0	0'1	32'9	31'4	—
24	Partly clouded; cir-cum., cir-strat., and haze; lunar halo at 9 <sup>h</sup> , diameter 40 <sup>h</sup>	0'4	0'9	1'0	0'4	40'9	23'2	—
25	Clouded all day; cir-cum., cum-strat., and haze	1'0	1'0	1'0	1'0	37'9	30'0	—
26	Generally clouded; cir-cum., cum-strat., cir., and haze	0'9	1'0	0'5	0'6	43'6	30'1	—
27	—	0'2	0'0	—	—	36'6	18'0	—
28	Partly clouded and clear alternately; cir., cir-cum., and haze	—	—	0'7	0'0	26'1	17'1	—
29	Clear till 1 <sup>h</sup> ; remainder clouded; cir., cir-cum., and haze	0'1	1'0	1'0	1'0	35'4	30'0	—
30	Clouded to 20 <sup>h</sup> ; cir-cum., cir-strat., and haze; heavy storm; thunder; lightning; snow from 2 <sup>h</sup> to 16 <sup>h</sup>	1'0	1'0	1'0	0'1	43'9	23'0	—
31	Clear all day; some cir. and strat.	0'0	0'0	0'0	0'3	27'9	14'5	—
<b>APRIL.</b>								
1	Clouded all day; cir-cum., cir., and haze; snow from 6 <sup>h</sup> to 12 <sup>h</sup>	1'0	1'0	—	—	26'6	9'3	—
2	—	—	—	1'0	1'0	32'5	29'0	—
3	—	1'0	0'0	—	—	37'2	27'7	—
4	Clouded to 7 <sup>h</sup> and from 20 <sup>h</sup> to 2 <sup>h</sup> ; cir., cir-cum., and haze; remainder of the day clear	—	—	0'0	1'0	42'1	28'1	—
5	Clouded all day; cir., cir-strat., and haze; rain at 16 <sup>h</sup> and 17 <sup>h</sup>	1'0	1'0	1'0	1'0	40'5	30'9	—
6	Generally clouded; cir., cir-cum., and haze; rain occasionally	0'7	0'7	1'0	1'0	41'4	35'0	0'07
7	Clear to 14 <sup>h</sup> ; remainder clouded; cir-strat., cir-cum., and haze; brilliant aurora at night	0'0	0'0	0'9	1'0	49'7	39'7	—
8	Clouded till 12 <sup>h</sup> ; cir., cir-strat., cir-cum., and haze; solar halo at 2 <sup>h</sup> , diameter 30 <sup>h</sup> , perfect; rain from 8 <sup>h</sup> to 10 <sup>h</sup> ; auroral light in N. at 11 <sup>h</sup> ; clear	1'0	1'0	0'0	0'0	55'1	33'7	—
9	Partially clouded; cir-strat. and cir-cum.	0'6	0'3	1'0	0'5	59'5	33'7	—
10	—	0'9	0'0	—	—	45'9	36'7	—
11	Clear to 9 <sup>h</sup> ; remainder clouded; cir-cum., cum-strat., and haze	—	—	1'0	0'8	48'8	27'7	—
12	Partially clouded; cir-cum., cir-strat., and haze	0'8	0'3	0'5	0'0	41'3	30'3	—
13	Clear to 6 <sup>h</sup> ; remainder of the day clouded; cir-strat. and haze	0'0	0'8	1'0	1'0	48'3	26'5	—
14	Generally clouded; cir-strat. and haze; light rain from 9 <sup>h</sup> to 11 <sup>h</sup>	0'3	1'0	0'6	1'0	46'7	29'7	0'04
15	Clouded to 7 <sup>h</sup> ; cir-cum. and cum-strat.; remainder nearly clear	0'9	0'1	0'0	0'1	45'9	29'7	—
16	Generally clouded; cir-cum., cir-strat., and haze	1'0	0'8	1'0	0'7	38'1	24'2	—
17	—	1'0	0'0	—	—	39'8	30'9	—
18	Clear from 6 <sup>h</sup> to 11 <sup>h</sup> ; remainder of the day clouded; cir., cir-cum., and haze	—	—	1'0	1'0	35'4	17'4	—
19	Clouded and clear alternately; cir-strat. and haze; auroral light in N. from 13 <sup>h</sup> to 16 <sup>h</sup>	0'1	0'8	0'0	1'0	31'0	21'4	—
20	Clouded all day; cir-cum., cir-strat., and haze; rain; thunder occasionally	1'0	1'0	1'0	1'0	45'5	29'5	0'15
21	Generally clouded; cir-cum., cir-strat., and haze; rain and thunder from 10 <sup>h</sup> to 16 <sup>h</sup>	1'0	0'4	1'0	1'0	45'8	40'7	0'76
22	Clouded all day; cir-strat., cir., and cir-cum.; rain nearly all day	1'0	1'0	1'0	1'0	65'1	47'9	1'00
23	Clouded to 3 <sup>h</sup> ; cir-cum. and cum-strat.; remainder clear	0'4	0'0	0'0	0'0	51'9	35'1	0'07
24	Clear to 11 <sup>h</sup> ; remainder clouded; cir-cum., cir-strat., and cum-strat.	0'0	0'0	—	—	45'5	28'1	—
25	—	—	—	0'8	1'0	45'1	27'9	—
26	Mostly clouded; cir., cir-strat., and haze	1'0	0'9	0'9	0'4	51'2	42'1	—
27	Nearly clear all day	0'1	0'0	0'0	0'5	59'5	40'7	—
28	Clouded all day; cir-strat., cir-cum., and haze; sheet lightning and thunder to 7 <sup>h</sup> ; rain from 7 <sup>h</sup> to 9 <sup>h</sup> , and at 12 <sup>h</sup>	1'0	1'0	1'0	1'0	41'1	23'4	0'45
29	Clouded; cir-cum., cir-strat., and haze; rain at 5 <sup>h</sup>	1'0	0'7	1'0	0'7	42'7	34'1	0'33
30	Clear from 10 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded; cir-cum., cir., and cum-strat.; solar halo at 21 <sup>h</sup> , diameter 25 <sup>h</sup> ; imperfect light	0'8	0'8	0'0	0'8	44'6	35'2	—



Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MAY.								
1		1'0	1'0	—	—	47'7	26'7	0'05
2	Generally clouded; cir.-cum. and cir.-strat.; slight rain from 9 <sup>h</sup>	—	—	0'8	0'9	47'5	34'5	0'04
3	Partly clear to 6 <sup>h</sup> ; remainder clear	0'6	0'1	0'0	0'0	40'1	35'5	—
4	Clouded to 3 <sup>h</sup> ; cir.-cum. and cum.-strat.; remainder of the day clear	1'0	0'0	0'0	0'0	48'3	35'0	—
5	Clear all day	0'0	0'0	0'0	0'0	54'3	32'1	—
6	Clear all day	0'0	0'0	0'0	0'0	60'6	35'3	—
7	Clear to 2 <sup>h</sup> ; clouded; cir., cir.-strat., and haze; auroral light in N. from 10 <sup>h</sup> to 13 <sup>h</sup>	0'4	0'6	1'0	1'0	62'4	37'2	—
8		1'0	1'0	—	—	62'1	48'9	—
9	Clouded to 12 <sup>h</sup> ; cir.-cum., cir., and haze; clear	—	—	0'0	0'0	61'3	46'8	—
10	Clouded all day; cir.-cum., and haze; rain from 9 <sup>h</sup> to 13 <sup>h</sup>	1'0	1'0	1'0	1'0	56'7	45'2	0'32
11	Generally clouded; cir.-cum. and haze; slight rain	0'9	1'0	1'0	0'7	61'4	52'3	0'05
12	Clouded to 15 <sup>h</sup> ; cir.-strat. and haze; drizzling rain	1'0	1'0	0'1	0'0	61'3	53'9	0'27
13	Clear all day	0'0	0'0	0'0	0'0	66'1	53'6	—
14	Partly clouded to 3 <sup>h</sup> ; cir. and haze; remainder hazy	0'3	0'0	0'0	0'0	61'1	47'7	—
15		0'0	0'0	—	—	61'5	41'7	—
16	Clear all day	—	—	0'0	0'0	69'3	42'2	—
17	Clear all day	0'0	0'0	0'0	0'0	64'5	43'2	—
18	Clear to 12 <sup>h</sup> ; overcast; cir. and haze	0'0	0'0	1'0	1'0	65'5	44'1	—
19	Partly clouded from 8 <sup>h</sup> to 10 <sup>h</sup> ; cir., cir.-strat., and haze; clear	0'0	0'6	0'7	0'0	69'5	48'2	—
20	Clear to 16 <sup>h</sup> ; clouded; cir. and haze	0'0	0'0	0'0	1'0	65'7	48'7	—
21	Overcast all day; cir. and haze; slight rain	1'0	1'0	1'0	0'9	62'7	43'5	0'19
22	Clouded all day; cir. and haze; rain from 12 <sup>h</sup> to 2 <sup>h</sup>	1'0	1'0	—	—	63'0	49'9	—
23		—	—	1'0	1'0	68'5	54'5	0'53
24	Clouded to 7 <sup>h</sup> ; cir.-cum. and cir.-strat.; partly clear	1'0	0'4	0'2	0'5	60'8	51'5	—
25	Clouded to 20 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; light rain; clear	1'0	1'0	0'8	0'0	61'4	47'9	0'25
26	Clear all day	0'1	0'0	0'0	0'0	66'0	37'7	—
27	Nearly clear all day	0'0	0'0	0'1	0'7	57'8	35'9	—
28	Clouded; cir., cir.-strat., and cir.-cum.	0'4	0'8	1'0	1'0	59'2	42'3	—
29	Clouded all day; cir.-cum., cir.-strat., and haze; thunder; lightning; constant rain from 13 <sup>h</sup> to 23 <sup>h</sup>	1'0	1'0	—	—	72'1	55'5	0'41
30		—	—	1'0	1'0	65'4	47'9	0'05
31	Clouded all day; cir. and haze; constant rain to 16 <sup>h</sup> ; thunder and lightning at 13 <sup>h</sup> and 14 <sup>h</sup>	1'0	1'0	1'0	1'0	58'9	43'6	0'60
JUNE.								
1	Generally clouded; cir.-cum., cir.-strat., and haze; rain; thunder; lightning; rainbow at 7 <sup>h</sup>	1'0	1'0	0'0	0'6	48'2	43'8	0'52
2	Clear to 20 <sup>h</sup> ; remainder clouded; cir.-cum.	0'1	0'2	0'0	1'0	62'0	39'1	—
3	Generally clouded; slight rain occasionally	1'0	1'0	1'0	0'6	62'6	45'1	0'14
4	Nearly clear to 20 <sup>h</sup> ; clouded; cir.-cum.	0'2	0'0	0'0	1'0	62'1	52'7	—
5		0'1	0'0	—	—	62'4	36'7	—
6	Mostly clear	—	—	0'0	0'0	63'7	49'7	—
7	Nearly clear to 2 <sup>h</sup> ; remainder clouded; cir.-cum., cir.-strat., and haze	0'2	1'0	1'0	1'0	64'4	44'5	—
8	Clouded all day; cum.-strat., cir.-cum., and haze; slight rain from 10 <sup>h</sup> to 12 <sup>h</sup> ; sheet lightning in N.	1'0	1'0	1'0	1'0	70'5	53'1	0'02
9	Clouded; cir., cir.-strat., and haze; foggy; lightning in N.N.E. from 10 <sup>h</sup> to 13 <sup>h</sup>	0'4	0'4	1'0	1'0	61'8	53'9	—
10	Mostly clouded; cir.-cum., cir.-strat., and haze; rain	1'0	1'0	1'0	0'7	75'2	60'7	0'16
11	Clouded to 17 <sup>h</sup> ; cum.-strat., cir.-cum., and haze; remainder clear; constant rain from 6 <sup>h</sup> to 11 <sup>h</sup>	1'0	1'0	0'5	0'0	64'4	57'0	0'21
12	Mostly clear to 12 <sup>h</sup> ; clouded; cir.-cum. and haze; auroral light at 10 <sup>h</sup> and 11 <sup>h</sup> ; rain from 19 <sup>h</sup> to 23 <sup>h</sup>	0'1	0'0	—	—	66'7	46'6	—
13		—	—	1'0	1'0	66'6	46'7	0'18
14	Clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; remainder clouded; cir.-cum. and cum.-strat.; light rain at 1 <sup>h</sup> and from 18 <sup>h</sup> to 22 <sup>h</sup>	1'0	0'0	1'0	1'0	55'0	47'7	0'16
15	Clouded and clear alternately; cir.-cum., cum.-strat., and cir.-strat.	0'2	0'0	0'8	0'0	51'6	40'1	—
16	Nearly clear all day	0'5	0'0	0'0	0'0	58'6	43'7	—
17	Clear to 20 <sup>h</sup> ; remainder clouded; cir.-cum. and cum.-strat.	0'0	0'0	0'0	0'8	56'8	40'2	—
18	Clouded all day; cir.-cum. and cum.-strat.; rain from 4 <sup>h</sup> to 9 <sup>h</sup>	1'0	1'0	1'0	1'0	67'9	42'7	0'25
19		0'8	0'0	—	—	65'5	56'0	0'48
20	Clouded to 3 <sup>h</sup> ; cir.-strat. and haze; remainder mostly clear; thunder; showers at 0 <sup>h</sup>	—	—	0'2	0'2	67'1	48'7	0'13
21	Generally clouded; cir.-cum. and haze; rain at 1 <sup>h</sup> ; lightning	0'7	0'9	0'2	1'0	60'2	50'2	0'07
22	Clouded to 11 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; remainder clear; thunder; showers occasionally	0'8	0'7	0'0	0'1	67'0	49'0	0'15
23	Generally clear	0'3	0'1	0'0	0'0	68'4	50'1	—
24	Clear to 12 <sup>h</sup> ; remainder clouded; cir.-cum.; cir.-strat.	0'0	0'0	0'6	1'0	71'1	50'7	—
25	Clouded to 16 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; thunder and lightning in S.E. at 10 <sup>h</sup> ; clear	0'9	0'2	1'0	0'0	74'6	52'7	—
26		0'8	0'7	—	—	75'0	58'9	—
27	Generally clouded; cir.-cum., cum., and cir.	—	—	1'0	1'0	77'8	59'3	—
28	Mostly clouded; cir.-cum. and cir.-strat.; thunder at 5 <sup>h</sup> and 6 <sup>h</sup>	0'7	1'0	1'0	1'0	76'4	61'5	—
29	Clouded at 5 <sup>h</sup> and 20 <sup>h</sup> ; cir.-cum. and haze; remainder clear	0'7	0'0	0'0	0'8	74'9	55'3	—
30	Generally clear	0'0	0'0	0'0	0'0	72'4	54'9	—

Max. Therm.	Min. Therm.	Rain.
47.7	26.7	0.05
47.5	31.5	0.01
40.1	35.5	—
48.3	35.0	—
54.3	32.1	—
60.6	35.3	—
62.4	37.2	—
62.1	48.9	—
61.3	46.8	—
56.7	45.2	0.32
61.4	52.3	0.05
61.3	53.9	0.27
66.4	53.6	—
61.1	47.7	—
61.5	41.7	—
69.3	42.2	—
61.5	43.2	—
65.5	41.1	—
69.5	48.2	—
65.7	43.5	—
62.7	48.7	0.19
63.0	49.9	—
68.5	51.5	0.23
60.8	51.5	—
61.4	47.9	0.25
66.0	37.7	—
57.8	35.9	—
59.2	42.3	—
72.1	55.5	0.11
65.4	47.9	0.05
58.9	43.6	0.60

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
JULY.								
0	1	Clear all day	0.0	0.0	0.0	0.0	72.1	49.5
0	2	Clear all day	0.0	0.0	0.0	0.0	75.8	53.5
0	3	Mostly clear all day	0.2	0.1	—	—	78.8	54.5
0	4		—	—	0.0	0.3	81.3	51.5
0	5	Mostly clouded all day; thunder; slight rain at 6 <sup>h</sup>	0.8	1.0	1.0	1.0	79.2	55.7
0	6	Overcast, with haze	1.0	1.0	1.0	1.0	81.3	66.3
0	7	Generally clouded; cir. and haze	1.0	1.0	0.2	1.0	78.2	62.1
0	8	Clouded at 8 <sup>h</sup> and 21 <sup>h</sup> ; cir. and haze; remainder clear	1.0	0.0	0.0	1.0	80.8	61.0
0	9	Clouded all day; cir. and haze; auroral light in N. at 10 <sup>h</sup>	1.0	1.0	1.0	1.0	80.2	65.2
0	10	Clouded to 11 <sup>h</sup> ; lightning at 11 <sup>h</sup> ; remainder generally clear; auroral light at 13 <sup>h</sup>	0.9	1.0	—	—	81.0	67.5
0	11		—	—	0.0	0.8	81.3	67.1
0	12	Generally clouded; cir. and haze	0.2	1.0	1.0	1.0	78.4	64.4
0	13	Clouded to 8 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; clear	1.0	0.0	0.0	0.0	82.7	63.5
0	14	Generally clear	0.0	0.4	0.0	0.5	83.1	55.5
0	15	Partly clear to 8 <sup>h</sup> and from 11 <sup>h</sup> to 18 <sup>h</sup> ; clouded; cir. and haze	0.5	1.0	0.0	1.0	73.7	50.9
0	16	Clear from 9 <sup>h</sup> to 10 <sup>h</sup> ; generally clouded; cir., cir.-cum., and haze	0.9	0.0	0.5	0.8	76.4	59.0
0	17	Clouded to 14 <sup>h</sup> ; cir.-cum. and haze; clear; rain, thunder, and lightning during the day	1.0	1.0	—	—	82.8	66.1
0	18		—	—	0.2	0.0	84.2	70.0
0	19	Clouded and clear alternately; cir., cir.-cum., and cum.; sleet lightning	0.5	0.0	0.2	1.0	82.4	66.5
0	20	Clouded all day; cir.-cum. and cum.-strat.; thunder, lightning, and showers during the day	1.0	1.0	1.0	1.0	87.0	68.0
0	21	Partially clouded; cir.-cum. and cum.-strat.; constant lightning, and rain at 16 <sup>h</sup>	0.3	0.0	0.7	0.3	80.2	68.4
0	22	Generally clear	0.3	0.0	0.0	0.2	81.0	66.2
0	23	Generally clear to 15 <sup>h</sup> ; clouded; cir. and haze	0.1	0.1	0.1	1.0	78.8	48.2
0	24	Clouded all day; cir. and haze; rain, thunder, and lightning	1.0	1.0	—	—	74.2	53.0
0	25		—	—	1.0	1.0	69.6	64.2
0	26	Generally clear	0.3	0.1	0.0	0.1	75.9	58.5
0	27	Mostly clear	0.1	0.0	0.0	0.2	62.9	43.2
0	28	Clouded to 8 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; clear	0.8	0.0	0.0	0.0	64.6	44.0
0	29	Generally clouded; cir.-cum. and cum.-strat.; clear; rain	1.0	1.0	1.0	0.4	65.4	47.2
0	30	Partly clouded to 12 <sup>h</sup> ; cum.-strat., cir.-cum., and cum.; clear; light rain	0.3	0.7	0.0	0.1	70.4	55.7
0	31	Clouded to 8 <sup>h</sup> ; cum., cir.-cum., and cum.-strat.; rain; clear	0.9	0.1	—	—	66.2	44.0
0	Aug. 1		—	—	0.0	0.4	71.2	51.1
AUGUST.								
6	1	Generally clear	0.4	0.0	0.0	0.2	69.6	46.0
0	2	Generally clear	0.1	0.0	0.0	0.4	72.2	47.9
0	3	Generally clear; aurora from 9 <sup>h</sup> to 14 <sup>h</sup>	0.7	0.0	0.3	0.3	73.8	50.5
0	4	Clouded and clear alternately; cir., cir.-strat., and haze	0.1	0.6	0.0	0.8	76.6	55.0
0	5	Mostly clouded; cir., cir.-strat., and haze; lightning, thunder, rain	1.0	0.9	1.0	1.0	74.4	58.0
0	6	Clouded; cir., cir.-strat., and haze; solar halo at 2 <sup>h</sup> , diameter 40'; rain	0.9	0.2	—	—	78.0	57.8
0	7		—	—	1.0	1.0	72.8	58.5
0	8	Clouded; cir.-cum., cum.-strat., and haze; lightning at 9 <sup>h</sup> and 10 <sup>h</sup>	0.4	0.6	1.0	0.7	62.4	60.2
0	9	Clouded all day; cir.-cum., cir.-strat., and haze; slight rain	1.0	1.0	1.0	1.0	74.3	62.0
0	10	Clouded to 4 <sup>h</sup> ; cir.-cum. and haze; nearly clear; rain from 10 <sup>h</sup> to 4 <sup>h</sup>	1.0	0.0	0.1	0.2	77.4	55.2
0	11	Generally clouded; cir.-cum. and haze; thunder at 3 <sup>h</sup>	0.7	0.9	0.9	0.7	73.0	63.0
0	12	Clouded; cir.-cum. and cir.-strat.; lightning; rain	0.9	0.3	1.0	0.4	75.2	61.0
0	13	Clear from 12 <sup>h</sup> to 18 <sup>h</sup> ; remainder clouded; lightning in S.W. from 12 <sup>h</sup> to 15 <sup>h</sup>	0.6	0.8	—	—	76.9	64.5
0	14		—	—	0.0	0.8	79.1	64.5
0	15	Clouded at 4 <sup>h</sup> and 21 <sup>h</sup> ; cir.-cum. and cir.-strat.; remainder clear; auroral light in N. at 13 <sup>h</sup>	0.7	0.0	0.0	1.0	81.0	63.6
0	16	Generally clouded; cum.-strat. and cir.-cum.; lightning; thunder; rain at intervals	1.0	1.0	1.0	0.5	82.6	63.0
0	17	Clear from 6 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cir.-cum. and cir.	0.7	0.0	1.0	0.7	75.6	52.5
0	18	Partly clouded; cir.-cum. dispersed; clear	0.5	0.2	0.0	0.2	67.4	44.6
0	19	Partly clouded to 12 <sup>h</sup> ; cir.-cum. and cum.-strat.; slight rain; clear	0.9	0.2	0.0	0.1	66.0	50.0
0	20	Nearly clear; auroral light in N. at 11 <sup>h</sup>	0.2	0.0	—	—	72.6	52.5
0	21		—	—	0.0	0.1	73.6	51.5
0	22	Generally clear to 20 <sup>h</sup> ; remainder clouded; cir. and haze	0.2	0.2	0.2	0.8	72.4	51.0
0	23	Partly clouded; cir. and haze	0.4	0.2	0.5	0.0	68.0	50.5
0	24	Clear and partly clouded alternately	0.3	0.0	0.4	0.6	70.3	52.0
0	25	Generally clouded; cir.-cum. and haze; rain	0.3	0.8	1.0	1.0	70.8	51.7
0	26	Clear all day; very light rain	0.1	0.0	0.0	0.0	74.5	55.8
0	27	Generally clear all day	0.1	0.4	—	—	65.7	46.0
0	28		—	—	0.1	0.4	68.7	51.5
0	29	Mostly clear from 6 <sup>h</sup> to 18 <sup>h</sup> ; remainder clouded; cum., cir.-cum., and haze; rain	1.0	0.1	0.0	1.0	68.0	51.0
0	30	Clear from 6 <sup>h</sup> to 10 <sup>h</sup> ; remainder clouded; cir.-cum. and haze	1.0	0.0	1.0	1.0	73.0	48.1

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
SEPTEMBER.								
D.						°	°	in.
1	Nearly clear all day	0'2	0'0	0'0	0'1	62'4	44'9	—
2	Generally clear to 18 <sup>h</sup> ; clouded	0'1	0'0	0'0	1'0	66'1	49'3	—
3	Generally clouded; cir.-cum. and cir.-strat.; slight rain at 6 <sup>h</sup>	0'9	0'8	1'0	1'0	71'8	52'2	0'01
4	Clouded to 12 <sup>h</sup> ; cir.-cum. and haze; lightning, thunder, and rain from 10 <sup>h</sup> to 11 <sup>h</sup> ; hurricane	1'0	0'9	—	—	74'5	56'0	0'51
5	at Cornwall, Upper Canada, at 21 <sup>h</sup>	—	—	0'0	0'0	60'3	57'6	1'24
6	Mostly clear	0'4	0'0	0'0	0'3	69'9	47'3	—
7	Generally clouded; cir.-cum. and cir.-strat.; clear occasionally	0'8	0'9	1'0	1'0	67'4	51'0	—
8	Mostly clear all day; cir.-cum. and cum.-strat.; thunder, lightning, and rain from 6 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	1'0	0'9	65'0	61'9	2'50
9	Clouded to 5 <sup>h</sup> ; cir.-cum., cir.-strat., and cir.; quite clear; rain	0'9	0'0	0'0	0'0	74'5	49'7	0'15
10	Clear and fine to 20 <sup>h</sup> ; clouded	0'1	0'0	0'0	0'7	60'2	41'3	—
11	Nearly clear to 11 <sup>h</sup> ; remainder clouded; cir.-cum. and cum.-strat.; slight rain	0'1	0'0	—	—	63'7	45'7	—
12	Clouded all day; cum.-strat. and cir.-strat.; slight rain	1'0	1'0	1'0	1'0	62'8	47'6	0'09
13	Clouded all day; cum.-strat. and cir.-strat.; clear	1'0	1'0	1'0	1'0	65'8	52'9	0'01
14	Quite clear all day	0'0	0'0	0'0	0'0	55'1	41'0	—
15	Quite clear	0'0	0'0	0'0	0'0	52'9	35'8	—
16	Generally clear to 9 <sup>h</sup> ; remainder clouded; cir.-cum. and cir.-strat.	0'0	0'1	1'0	0'6	57'6	35'0	—
17	Generally clouded; cir.-cum. and cir.-strat.; rain from 8 <sup>h</sup> to 17 <sup>h</sup>	0'7	1'0	1'0	1'0	59'4	47'7	0'25
18	Clouded all day; cir.-cum. and cir.-strat.; rain from 0 <sup>h</sup> to 4 <sup>h</sup>	1'0	1'0	—	—	62'2	54'5	0'09
19	Clouded; cir.-cum. and cir.-strat.; slight rain	1'0	0'7	1'0	0'7	57'7	51'6	—
20	Nearly clear to 20 <sup>h</sup> ; remainder clouded; cum.-strat. and cir.-cum.	0'2	0'0	0'0	0'6	56'8	51'2	—
21	Clouded to 6 <sup>h</sup> ; cir.-cum. and cum.-strat.; clear	0'6	0'0	0'0	0'1	62'4	41'8	—
22	Nearly clouded; cir.-cum. and cir.-strat.; lunar halo at 9 <sup>h</sup> ; diameter 40 <sup>z</sup> ; imperfect	0'7	1'0	1'0	1'0	59'8	45'2	—
23	Clouded all day; cir.-cum. and haze; rain from 4 <sup>h</sup> to 14 <sup>h</sup>	1'0	1'0	1'0	1'0	67'0	51'3	0'09
24	Clouded all day; cir.-cum., cir.-strat., and haze; heavy storm of thunder; lightning; rain from 12 <sup>h</sup> to 15 <sup>h</sup>	1'0	1'0	—	—	55'6	48'7	0'01
25	Clouded to 7 <sup>h</sup> ; cir., cir.-strat., and cir.-cum.; showers, thunder, and lightning from 5 <sup>h</sup> to 8 <sup>h</sup> ; clear	0'6	0'1	0'0	0'0	59'3	55'2	0'19
26	Clear from 12 <sup>h</sup> to 17 <sup>h</sup> ; remainder clouded; cir.-cum. and cum.-strat.; lightning, thunder, and rain at 6 <sup>h</sup>	0'8	0'1	0'0	1'0	68'8	46'2	0'04
27	Partly clouded to 15 <sup>h</sup> ; cir.-cum. and cum.-strat.; thunder; lightning; rain from 6 <sup>h</sup> to 4 <sup>h</sup> ; frost; clear	0'8	0'3	0'2	0'0	60'0	39'7	0'11
28	Generally clouded	1'0	1'0	1'0	0'6	55'0	37'3	0'11
OCTOBER.								
1	Clouded to 5 <sup>h</sup> ; remainder clear	0'7	0'0	0'0	0'0	54'4	43'7	—
2	Clouded to 10 <sup>h</sup> ; cir.-cum.; remainder mostly clear	0'2	1'0	—	—	53'6	36'2	—
3	Generally clouded; cir.-cum. and cir.-strat.; lightning; thunder from 9 <sup>h</sup> to 17 <sup>h</sup> ; showers at 17 <sup>h</sup>	—	—	0'0	0'1	55'9	38'5	—
4	Mostly clouded; rain most of the day	0'6	1'0	1'0	1'0	60'2	52'5	0'76
5	Clouded; dense; cir.-cum. and haze; rain most of day	1'0	1'0	1'0	1'0	61'6	56'0	1'18
6	Clouded; cir.-cum. and cir.-strat.; slight rain most of day	1'0	1'0	1'0	1'0	58'4	54'5	0'55
7	Clouded to 8 <sup>h</sup> ; cir.-cum. and haze; clear; aurora at 11 <sup>h</sup>	1'0	0'2	0'0	0'3	56'4	55'1	—
8	Clouded to 9 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; slight rain; clear	1'0	1'0	—	—	58'7	40'2	0'01
9	Clouded; cir.-cum. and haze; slight rain	—	—	0'3	0'0	56'2	42'2	—
10	Clouded to 10 <sup>h</sup> and partly to 23 <sup>h</sup> ; cir.-cum., cir.-strat., and haze; rain to 10 <sup>h</sup> ; auroral light in N. from 15 <sup>h</sup> to 18 <sup>h</sup>	1'0	1'0	0'3	0'8	50'6	36'9	0'26
11	Clear from 6 <sup>h</sup> to 12 <sup>h</sup> ; remainder partly clouded; cir.-cum. and cir.-strat.; lightning in E. at 7 <sup>h</sup>	0'4	0'0	0'7	0'3	47'5	37'8	—
12	Clear from 6 <sup>h</sup> to 13 <sup>h</sup> ; remainder clouded; cir.-cum. and cum.-strat.; snow; aurora at 12 <sup>h</sup>	0'6	0'0	1'0	0'9	47'0	32'0	—
13	Clouded to 10 <sup>h</sup> ; cir.-cum. and haze; clear; auroral light at 14 <sup>h</sup>	1'0	0'5	0'0	0'0	40'4	26'7	—
14	Clouded from 3 <sup>h</sup> to 9 <sup>h</sup> ; cir.-cum., and haze; remainder partly clear; solar halo at 6 <sup>h</sup> ; diameter 25 <sup>z</sup> ; rain from 6 <sup>h</sup> to 8 <sup>h</sup>	0'3	1'0	—	—	41'0	37'2	—
15	Partly clouded from 3 <sup>h</sup> to 14 <sup>h</sup> ; cir.-cum. and haze; clear; slight rain	—	—	0'0	0'6	55'3	46'3	—
16	Clouded to 5 <sup>h</sup> ; cir.-cum. and cir.-strat.; clear	0'3	1'0	0'0	0'0	60'0	36'4	0'14
17	Clouded to 14 <sup>h</sup> ; clouded; cir., cir.-strat., and haze	0'8	0'0	0'0	0'0	61'4	41'0	—
18	Clear to 14 <sup>h</sup> ; clouded; cir., cir.-strat., and haze	0'0	0'0	0'2	1'0	54'1	28'8	—
19	Clouded all day; cir., cir.-strat., and haze; rain from 10 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	1'0	1'0	54'0	30'2	0'55
20	Clouded to 16 <sup>h</sup> ; cir.-cum. and haze; rain at 23 <sup>h</sup> ; remarkable appearance of aurora at 16 <sup>h</sup>	1'0	1'0	0'4	0'0	44'5	37'3	—
21	Generally clear to 12 <sup>h</sup> ; remainder clouded; dense; cir. and haze; constant rain	0'1	0'3	—	—	40'4	33'3	—
22	Clouded from 0 <sup>h</sup> to 8 <sup>h</sup> and from 16 <sup>h</sup> to 23 <sup>h</sup> ; cir.-cum. and cum.-strat.	—	—	1'0	0'9	49'0	35'5	0'97
23	Clear from 4 <sup>h</sup> to 13 <sup>h</sup> ; clouded; slight rain	0'6	0'0	0'0	0'9	45'7	45'3	—
24	Clouded to 9 <sup>h</sup> ; cir.-cum. and cum.-strat.; clear	0'3	0'0	0'8	0'3	48'4	28'4	—
25	Generally clear	1'0	1'0	0'0	0'0	31'8	20'4	—
26	Clear from 9 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded	0'0	0'1	0'0	0'3	35'5	24'7	—
27	Clear from 9 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded	0'9	0'0	0'0	1'0	40'8	27'3	—
28	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cir., cir.-strat., and haze; rain from 13 <sup>h</sup> to 17 <sup>h</sup>	1'0	0'0	—	—	48'9	32'2	—
29	Generally clear	—	—	1'0	1'0	50'9	32'0	0'39

\* Taken from the lowest reading of the Standard Thermometer.

Toronto Menn Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
<b>NOVEMBER.</b>								
D.								In.
1	Generally clouded; cir. and cir.-strat.; dense fog	0'3	1'0	1'0	1'0	51'0	47'7	—
2	Generally clouded; cir.-cum. and cir.-strat.; lightning; faint aurora	1'0	1'0	0'2	1'0	54'8	46'4	—
3	Clouded to 5 <sup>h</sup> , and from 18 <sup>h</sup> to 23 <sup>h</sup> ; cir.-cum. and haze; lightning, thunder, and rain from 0 <sup>h</sup> to 5 <sup>h</sup> ; remainder clear	1'0	0'0	0'0	0'6	57'9	45'5	0'09
4	Mostly clear to 20 <sup>h</sup> ; cir.-cum.; remainder clouded	0'1	0'0	0'1	0'8	51'4	40'3	—
5	Clouded to 12 <sup>h</sup> , and from 16 <sup>h</sup> to 21 <sup>h</sup> ; remainder clear; auroral light in N. at 15 <sup>h</sup> and 16 <sup>h</sup>	0'5	1'0	0'0	0'9	51'1	41'3	—
6	Partly clear to 12 <sup>h</sup> ; remainder clouded; cir.-cum., cir.-strat., and haze; lightning; thunder at 16 <sup>h</sup> and 17 <sup>h</sup>	0'8	0'2	—	—	45'9	29'2	—
7	Clouded all day; dense haze; rain	1'0	1'0	1'0	1'0	53'0	27'8	0'03
8	Clear to 14 <sup>h</sup> ; remainder clouded; cir.-cum. and cum.-strat.; aurora at 9 <sup>h</sup> and 10 <sup>h</sup>	0'1	0'0	1'0	1'0	51'3	47'7	0'06
9	Clouded all day; cir.-cum. and cum.-strat.	1'0	1'0	1'0	1'0	55'2	36'7	—
10	Clouded to 18 <sup>h</sup> ; cir.-cum. and cum.-strat.; clear	1'0	1'0	1'0	0'1	39'7	31'1	—
11	Clouded to 18 <sup>h</sup> ; cir.-cum. and cir.-strat.; remainder generally clear	1'0	0'9	1'0	0'3	37'2	30'5	—
12	Clouded all day; cir.-strat., cir.-cum., and haze; rain from 9 <sup>h</sup> to 16 <sup>h</sup> on the 13th	1'0	1'0	—	—	39'4	33'1	0'71
13	Generally clouded; cir.-cum. and cum.-strat.	1'0	1'0	0'4	1'0	41'1	36'2	—
14	Nearly clouded all day; cir.-cum., cir.-strat., and haze	0'9	1'0	1'0	0'9	41'0	27'2	—
15	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 9 <sup>h</sup> to 16 <sup>h</sup>	1'0	1'0	1'0	1'0	47'7	43'7	0'17
16	Clouded all day; cir.-cum., cir.-strat., and haze; mist; rain	1'0	1'0	0'9	1'0	52'0	42'7	0'32
17	Clouded to 10 <sup>h</sup> ; cir.-cum. and cum.-strat.; nearly clear	1'0	0'9	0'1	0'4	49'6	28'2	—
18	Mostly clouded all day; cir.-cum., cir.-strat., and haze; lunar halo at 6 <sup>h</sup> , diameter 45'	0'8	1'0	—	—	33'1	18'3	—
19	Nearly clear from 2 <sup>h</sup> to 13 <sup>h</sup> ; clouded; cir.-strat. and haze; very slight rain	0'1	0'2	1'0	1'0	42'1	22'3	0'01
20	Clouded all day; cir.-strat., cir.-cum., and haze; rain	1'0	1'0	1'0	1'0	46'2	46'7	0'35
21	Generally clouded; cir.-cum., cir.-strat., and haze; slight rain	1'0	1'0	1'0	0'5	52'0	36'1	0'25
22	Clouded all day; cir.-cum., cum.-strat., and cir.-strat.; slight rain; snow; auroral light in N. at 6 <sup>h</sup> and 7 <sup>h</sup>	1'0	1'0	1'0	1'0	49'7	38'9	0'13
23	Partly clear from 5 <sup>h</sup> to 13 <sup>h</sup> ; clouded; cir.-cum. and cir.-strat.; aurora at 5 <sup>h</sup>	0'8	0'0	1'0	1'0	42'9	24'7	—
24	Clear from 11 <sup>h</sup> to 13 <sup>h</sup> ; clouded; cir.-strat., cir.-cum., and haze; clear; some snow	0'6	1'0	—	—	26'2	19'7	—
25	Partly clear; cir.-cum., cir.-strat., and haze	—	—	0'0	0'6	31'0	24'7	—
26	Clear to 18 <sup>h</sup> ; remainder clouded; cir.-cum., cir.-strat., and haze	0'2	0'1	0'8	0'3	21'6	8'7	—
27		0'0	0'0	0'0	1'0	18'3	11'5	—
28								
29								
30								
31								
<b>DECEMBER.</b>								
1	Clouded all day; cir.-cum., cir.-strat., and haze; rain from 8 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	1'0	1'0	29'9	22'7	0'25
2	Clouded all day; cir.-cum. and haze; slight rain from 2 <sup>h</sup> to 23 <sup>h</sup>	1'0	1'0	1'0	1'0	40'0	35'0	0'11
3	Nearly clouded all day; cum.-cum. and haze	1'0	1'0	1'0	0'9	38'1	32'5	—
4	Partially clouded; cir.-strat., cir.-cum., and haze; snow	1'0	1'0	—	—	33'5	25'2	—
5	Clouded to 11 <sup>h</sup> ; cir.-cum. and cum.-strat.; remainder nearly clear	0'9	1'0	0'0	0'2	33'2	26'0	—
6	Partly clear; cir. and cir.-strat. occasionally	1'0	0'1	0'6	0'5	37'0	28'2	—
7	Partly clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; clouded; cir., cir.-strat., and haze	1'0	0'1	1'0	1'0	39'4	30'5	—
8	Mostly clouded all day; cir.-strat. and haze; rain to 8 <sup>h</sup>	1'0	1'0	1'0	0'6	45'5	35'2	0'21
9	Clouded all day; cir.-cum., cir., and haze; rain from 14 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	1'0	1'0	36'8	38'0	—
10	Partly clear from 3 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cir.-cum. and haze; slight rain from 12 <sup>h</sup> to 17 <sup>h</sup>	0'1	0'2	—	—	39'6	33'0	0'05
11	Clouded all day; cir.-cum. and haze; rain, snow, and sleet all day	1'0	1'0	1'0	1'0	42'9	33'0	0'27
12	Clouded to 18 <sup>h</sup> ; cir.-cum. and haze; slight rain from 1 <sup>h</sup> to 9 <sup>h</sup> ; clear	1'0	1'0	1'0	0'4	36'4	29'9	0'11
13	Clear and fine to 18 <sup>h</sup> ; remainder clouded; cir.-cum. and cir.-strat.	0'1	0'0	0'0	0'9	33'2	29'5	—
14	Generally clouded; cir.-cum. and cir.-strat.; aurora from 15 <sup>h</sup> to 17 <sup>h</sup>	1'0	1'0	0'4	0'7	33'3	42'9	—
15	Generally clear; auroral light at 11 <sup>h</sup>	0'6	0'2	0'6	0'0	21'1	14'9	—
16	Clouded all day; cir.-cum. and haze; aurora at 17 <sup>h</sup> ; great magnetic disturbance	1'0	1'0	—	—	27'2	10'9	—
17	Generally clouded; cir.-cum. and cir.-strat.; clear occasionally	0'2	1'0	1'0	0'7	33'7	12'1	—
18	Clouded all day; cir., cir.-cum., and cum.-strat.; snow from 9 <sup>h</sup> to 15 <sup>h</sup>	1'0	1'0	1'0	1'0	15'9	9'3	—
19	Clouded all day; cir.-cum. and haze; snow to 1 <sup>h</sup>	1'0	1'0	1'0	1'0	21'6	18'1	—
20	Clouded; cir.-cum., cir.-strat., and haze; snow to 4 <sup>h</sup>	1'0	1'0	1'0	0'1	21'8	17'4	—
21	Generally clouded; cir.-cum., cir.-strat., and haze; snow	0'8	1'0	1'0	0'9	22'2	15'2	—
22	Clouded all day; cir.-cum., cir.-strat., and haze; snow	1'0	1'0	1'0	1'0	19'9	5'1	—
23	Clouded all day; cir.-cum., cir.-strat., and haze	1'0	1'0	1'0	1'0	28'8	18'2	—
24	Generally clouded; cir. and cir.-cum.	1'0	0'4	1'0	1'0	36'4	32'9	—
25	Clouded all day; cir.-strat. and haze	1'0	1'0	1'0	1'0	43'0	36'2	—
26	Clouded all day; dense haze; drizzling rain	1'0	1'0	1'0	1'0	45'9	40'1	0'22



	Max. Therm.	Min. Therm.	Rain.
	45.2	32.2	0.26
	51.1	29.7	—
	35.1	30.7	—
	37.6	26.7	—
	34.0	17.5	—
	36.2	10.5	—
	14.3	10.9	—
	29.6	18.1	—
	33.4	13.0	—
	13.8	11.4	—
	1.0	-8.9	—
	22.4	7.1	—
	32.4	20.3	—
	36.5	35.2	0.95
	40.2	33.0	—
	37.0	27.7	—
	32.5	23.2	—
	30.9	19.9	—
	29.8	5.7	—
	28.8	17.6	—
	41.4	21.7	—
	45.0	13.6	—
	29.2	17.0	—
	21.2	17.1	—
	32.0	24.5	0.01
	39.3	35.0	0.77
	40.2	36.5	—
	41.8	30.1	—
	31.8	21.2	—
	31.8	21.7	0.25
	32.0	22.5	—
	38.5	21.2	—
	29.7	17.9	—
	35.8	27.0	—
	40.8	26.1	0.41
	39.0	26.7	—
	28.4	23.9	—
	28.4	21.0	—
	26.6	16.1	—
	27.8	17.6	—
	34.2	13.1	—
	21.0	0.0	—
	15.0	10.8	—
	25.2	11.9	—
	31.7	18.2	—
	38.2	18.5	—
	32.6	19.5	—
	35.0	19.7	—
	36.2	19.8	—
	37.1	28.5	0.27
	38.8	34.0	0.02
	41.2	36.3	—
	46.6	29.7	0.08
	40.0	28.6	—
	36.5	22.4	—
	29.8	10.7	—
	23.4	11.4	—
	33.6	22.9	—
	30.0	12.6	—
	36.1	18.6	—

Toronto Memo Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
<b>MARCH.</b>								
D.								In.
1	Partially clear and partially clouded; cir-cum. and cum-strat.; auroral light in N. at 11 <sup>h</sup>	1.0	0.0	1.0	1.0	22.2	7.3	—
2	Clouded all day; cir-cum., cir-strat., and haze; snowing most of the day	1.0	1.0	1.0	1.0	21.0	0.0	—
3	Clear from 7 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded, with cir-cum., cir-strat., and haze	1.0	0.0	1.0	0.0	20.8	14.4	—
4	Clouded all day; cir-cum. and cir-strat.; showers of snow; squally	1.0	1.0	—	—	26.1	16.9	—
5		—	—	1.0	1.0	24.2	13.0	—
6		—	0.4	0.2	1.0	1.0	22.7	11.4
7	Clouded till 2 <sup>h</sup> , and from 9 <sup>h</sup> to 14 <sup>h</sup> ; cir-strat. and haze; remainder mostly clear	0.4	1.0	0.4	1.0	32.1	15.5	—
8	Mostly clouded; cir-cum., cir-strat., and haze; slight rain; auroral light in N. at 9 <sup>h</sup>	1.0	0.4	1.0	1.0	41.1	35.7	0.06
9	Nearly clear from 12 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded; cir-cum. and cum-strat.	1.0	1.0	0.2	1.0	47.1	22.5	—
10	Generally clear	0.1	0.0	0.0	0.0	28.8	15.9	—
11	Clear till 12 <sup>h</sup> ; remainder mostly clouded; cir-cum. and haze; shower of snow at 13 <sup>h</sup>	0.0	0.1	—	—	31.4	16.1	—
12		—	—	0.7	0.3	31.0	29.2	0.28
13	Mostly clear	0.5	0.0	0.2	0.7	39.6	22.9	—
14	Mostly clear; aurora from 11 <sup>h</sup> to 14 <sup>h</sup>	0.6	0.0	0.0	0.2	25.0	11.2	—
15	Mostly clear till 15 <sup>h</sup> ; remainder clouded; cir-strat. and haze	0.0	0.0	0.2	1.0	15.8	3.4	—
16	Generally clouded; cir-strat. and haze; halo round moon at 8 <sup>h</sup> and 9 <sup>h</sup> , diameter 45 <sup>o</sup> ; aurora at 16 <sup>h</sup> and 17 <sup>h</sup>	0.8	1.0	0.3	1.0	17.6	8.0	—
17	Clear	0.1	0.0	0.0	0.1	28.5	22.9	—
18	Clouded till 11 <sup>h</sup> , and at 21 <sup>h</sup> ; cir-cum. and cir-strat.; remainder of day generally clear; auroral light in N. at 16 <sup>h</sup> and 17 <sup>h</sup>	1.0	1.0	—	—	26.7	16.2	—
19	Clouded; cum-strat., cir-cum., and haze; rain from 0 <sup>h</sup> to 8 <sup>h</sup>	—	—	0.0	1.0	31.2	22.4	—
20		—	1.0	1.0	1.0	0.6	33.9	23.3
21	Mostly clouded till 4 <sup>h</sup> , and at 21 <sup>h</sup> ; cum-strat. and cir-strat.; remainder clear	0.7	0.0	0.0	1.0	33.3	33.8	—
22	Clouded; cir-cum. and cum-strat.	1.0	1.0	1.0	1.0	49.0	28.6	—
23	Mostly clouded till 1 <sup>h</sup> ; remainder clear	0.2	0.0	0.0	0.0	37.0	31.8	—
24	Partially clouded; cir-strat. and cir.; aurora from 9 <sup>h</sup> to 12 <sup>h</sup>	0.4	0.1	0.7	1.0	40.6	27.2	—
25	Clouded; cir-cum. and haze; rain at 11 <sup>h</sup>	1.0	1.0	—	—	39.0	33.7	—
26		—	—	1.0	1.0	43.8	37.8	0.17
27	Clouded till 8 <sup>h</sup> ; cir. and cir-strat.; remainder mostly clear; faint auroral light at 16 <sup>h</sup>	0.6	0.3	0.0	0.8	46.2	33.0	—
28	Generally clouded; cir-strat. and cir.; nearly clear at intervals	0.2	1.0	0.4	0.0	41.2	26.7	—
29	Clear	0.0	0.0	0.0	0.3	45.3	31.3	—
30	Mostly clouded; cir-strat. and haze	1.0	1.0	0.7	1.0	58.6	30.3	—
31	Mostly clouded; cir-cum. and haze; rain from 4 <sup>h</sup> to 11 <sup>h</sup> ; auroral light in N. from 12 <sup>h</sup> to 15 <sup>h</sup>	1.0	1.0	0.3	1.0	45.0	31.7	0.97
<b>APRIL.</b>								
1	Mostly clouded; cum-strat. and cum.; aurora at night, halo round the sun at 21 <sup>h</sup> , diameter 45 <sup>o</sup> , perfect	1.0	1.0	—	—	61.6	33.0	—
2		—	—	0.0	1.0	36.2	27.2	—
3	Clouded; cir. cir-strat., and haze	1.0	1.0	1.0	1.0	41.0	31.7	—
4	Clouded; cir-cum. and haze; rain from 0 <sup>h</sup> to 9 <sup>h</sup> ; aurora at 15 <sup>h</sup> and 16 <sup>h</sup>	1.0	1.0	0.0	0.0	47.7	42.2	0.28
5	Mostly clear; aurora from 10 <sup>h</sup> to 15 <sup>h</sup>	0.3	0.0	0.0	0.0	47.2	30.0	—
6	Clear all day; beautiful aurora from 9 <sup>h</sup> to 16 <sup>h</sup>	0.1	0.0	0.0	0.0	43.5	26.5	—
7	Clear	0.0	0.0	0.0	0.0	49.6	34.5	—
8	Mostly clear	0.1	0.0	—	—	46.5	22.7	—
9		—	—	0.3	0.4	53.5	32.3	—
10	Clear till 9 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0.0	0.3	1.0	1.0	59.2	34.9	—
11	Mostly clouded; cir-cum. and haze	1.0	1.0	0.2	0.3	65.1	43.4	—
12	Mostly clear till 4 <sup>h</sup> ; remainder clouded; cir-cum. and haze; slight rain from 9 <sup>h</sup> to 12 <sup>h</sup>	0.3	1.0	1.0	1.0	51.6	30.9	0.02
13	Clouded; cir-cum. cum-strat., and haze; slight rain from 2 <sup>h</sup> to 7 <sup>h</sup>	1.0	0.8	1.0	1.0	54.0	36.4	0.02
14	Clouded till 6 <sup>h</sup> ; cir-cum. and cum.; remainder partially clear	0.8	0.1	0.8	0.0	42.2	35.7	—
15	Nearly clear all day; aurora from 9 <sup>h</sup> to 14 <sup>h</sup>	0.1	0.0	—	—	47.8	33.5	—
16		—	—	0.0	0.6	56.3	34.1	—
17	Partially clear till 2 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0.9	1.0	1.0	1.0	62.2	30.7	—
18	Clouded till 10 <sup>h</sup> ; cir-strat. and haze; remainder clear; snow from 2 <sup>h</sup> to 9 <sup>h</sup>	1.0	1.0	0.0	0.0	41.8	32.9	—
19	Mostly clear	0.0	0.0	0.0	0.5	36.6	23.8	—
20	Mostly clear till 15 <sup>h</sup> ; remainder mostly clouded; cir-cum., cir-strat., and haze; aurora in N. from 1 <sup>h</sup> to 16 <sup>h</sup>	0.3	0.0	—	—	38.8	23.7	—
21	Clear from 4 <sup>h</sup> to 11 <sup>h</sup> ; remainder mostly clouded; cir-cum., cir-strat., and haze; auroral light at 8 <sup>h</sup>	—	—	0.2	1.0	50.0	33.2	—
22		—	0.5	0.0	—	51.1	40.5	—
23	Clouded till 7 <sup>h</sup> ; cum-strat. and cir-cum.; remainder clear; aurora at 10 <sup>h</sup>	0.9	0.0	0.0	1.0	51.6	27.8	—
24	Mostly clear	0.2	0.6	0.5	0.3	43.6	25.7	—
25	Mostly clear	0.6	0.0	0.0	0.0	45.7	28.9	—
26	Mostly clear till 15 <sup>h</sup> ; remainder clouded; cir. and haze	0.1	0.0	0.6	1.0	47.8	25.7	—
27	Clouded all day; cir. and haze; slight rain from 6 <sup>h</sup> to 15 <sup>h</sup>	1.0	1.0	1.0	1.0	53.8	36.1	0.17
28	Mostly clear till 20 <sup>h</sup> ; remainder clouded; cum-strat., cir-cum., and haze	0.4	0.0	—	—	49.3	41.5	—
29		—	—	0.0	1.0	50.0	28.2	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15	21			
MAY.								
1	Clouded till 8 <sup>h</sup> ; cir., cir-strat., and haze; remainder mostly clear; slight rain from 0 <sup>h</sup> to 7 <sup>h</sup>	1'0	0'0	0'7	0'8	52'6	33'4	0'11
2	Mostly clouded till 8 <sup>h</sup> ; cir-cum., cir-strat., and haze; remainder almost clear; auroral light at 6 <sup>h</sup>	1'0	0'3	0'0	0'7	49'1	34'6	—
3	Partly clouded till 8 <sup>h</sup> ; cum-strat. and cir-cum.; remainder clear	0'9	0'0	0'0	0'0	53'7	37'5	—
4	Clouded till 13 <sup>h</sup> ; cir-strat., cir-cum., and haze; remainder clear; thunder, lightning, and showers of rain from 6 <sup>h</sup> to 12 <sup>h</sup>	1'0	1'0	0'1	0'0	61'2	40'1	—
5	Mostly clouded from 3 <sup>h</sup> to 10 <sup>h</sup> ; cir-cum. and cum-strat.; thunder, lightning, and showers of rain from 5 <sup>h</sup> to 9 <sup>h</sup>	0'5	0'9	0'0	0'8	58'4	45'7	0'03
6	Mostly clouded till 6 <sup>h</sup> ; cum. and cir-cum.; distant thunder; remainder mostly clear; halo round the sun at 2 <sup>h</sup> , diameter 40 <sup>h</sup>	0'8	0'0	—	—	70'6	47'1	—
7	Generally clouded till 12 <sup>h</sup> ; cir-strat. and haze; remainder clear; auroral light in N. at 12 <sup>h</sup> and 13 <sup>h</sup>	—	—	0'2	1'0	71'8	47'7	0'09
8	Clouded; cir-cum. and cum.; showers of rain, lightning, and thunder from 6 <sup>h</sup> to 10 <sup>h</sup>	0'7	1'0	1'0	0'2	57'4	39'2	0'22
9	Generally clouded; cir., cir-cum., and haze; rain from 12 <sup>h</sup> to 15 <sup>h</sup>	0'9	1'0	1'0	1'0	62'0	42'9	0'15
10	Generally clouded; cir. and haze; rain from 6 <sup>h</sup> to 5 <sup>h</sup> ; imperfect halo round the moon at 9 <sup>h</sup> ; halo round the sun at 19 <sup>h</sup> , diameter 45	1'0	1'0	0'3	0'0	55'0	47'5	0'15
11	Generally clear till 15 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0'1	0'0	0'1	1'0	51'4	41'2	—
12	Clouded till 12 <sup>h</sup> ; cir-cum. and haze; rain from 0 <sup>h</sup> to 4 <sup>h</sup> ; remainder mostly clear	1'0	1'0	—	—	54'0	34'3	0'44
13	Mostly clouded; cir., cir-cum., and haze; rain occasionally from 3 <sup>h</sup> to 12 <sup>h</sup>	—	—	0'0	0'6	47'8	39'0	—
14	Clouded till 9 <sup>h</sup> ; cir-cum., cir-strat., and haze; remainder clear	1'0	1'0	1'0	1'0	56'4	32'5	0'23
15	Generally clear; aurora from 2 <sup>h</sup> to 14 <sup>h</sup>	1'0	0'8	0'0	0'5	57'2	46'4	—
16	Clear till 15 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0'1	0'0	0'0	0'0	59'4	34'2	—
17	Generally clouded; cir-cum. and haze; heavy storm of lightning, thunder, and rain between 3 <sup>h</sup> and 5 <sup>h</sup>	0'0	0'0	0'1	1'0	64'6	43'7	—
18	Generally clouded; cir-cum. and cir-strat.; showers of rain occasionally	1'0	1'0	—	—	71'7	55'5	0'26
19	Generally clouded; cir., cir-strat., and haze; storm of lightning, thunder, and rain from 11 <sup>h</sup> to 16 <sup>h</sup>	—	—	1'0	1'0	73'6	56'5	0'18
20	Generally clear till 20 <sup>h</sup> ; remainder clouded; cir-cum. and cir-strat.; auroral light in N. at 10 <sup>h</sup> and 12 <sup>h</sup>	0'9	0'6	1'0	1'0	60'6	57'8	—
21	Generally clouded till 15 <sup>h</sup> ; cir. and haze; remainder clear; auroral light in N. at 12 <sup>h</sup>	1'0	0'8	1'0	0'7	61'8	51'9	0'15
22	Mostly clear; auroral light in N. from 12 <sup>h</sup> to 15 <sup>h</sup>	0'2	0'0	0'0	1'0	59'6	53'5	—
23	Generally clear till 21 <sup>h</sup> ; remainder clouded; cum-strat. and cir-cum.; storm of lightning, thunder, and rain from 22 <sup>h</sup> to 23 <sup>h</sup>	0'8	0'3	0'4	0'0	73'8	50'3	—
24	Generally clear	0'8	0'0	0'0	0'1	78'0	46'5	—
25	Clear till 8 <sup>h</sup> ; remainder mostly clouded; cir-strat. and cir-cum.	0'1	0'0	—	—	66'8	46'7	—
26	Mostly clear	—	—	0'1	1'0	65'6	47'2	0'11
27	Clear till 8 <sup>h</sup> ; remainder mostly clouded; cir-strat. and cir-cum.	0'8	0'0	0'0	0'0	70'4	52'5	—
28	Mostly clear; auroral light in N. from 9 <sup>h</sup> to 12 <sup>h</sup>	0'0	0'2	0'6	0'3	75'6	47'7	—
29	Mostly clear; auroral light in N. from 9 <sup>h</sup> to 12 <sup>h</sup>	0'1	0'6	0'0	0'6	67'3	41'3	—
JUNE.								
1	Partly clouded till 15 <sup>h</sup> ; cir-cum., cir-strat., and haze; remainder clear	1'0	0'5	0'3	0'0	57'0	37'5	—
2	Clouded from 9 <sup>h</sup> to 12 <sup>h</sup> , and at 21 <sup>h</sup> ; cir. and haze; sheet lightning round S. horizon; remainder of day clear	0'0	1'0	0'1	1'0	63'8	41'7	—
3	Clouded till 8 <sup>h</sup> ; cir-cum. and haze; remainder clear	1'0	0'0	—	—	70'0	58'4	—
4	Clear and clouded alternately; showers; storm of lightning, thunder, rain, and hail at 5 <sup>h</sup> 30 <sup>m</sup>	—	—	0'0	0'0	71'0	54'8	0'76
5	Mostly clouded till 9 <sup>h</sup> , with cir-cum. and cir-strat.; remainder quite clear	0'9	0'5	0'1	0'8	65'5	47'7	0'30
6	Quite clear	0'3	1'0	0'0	0'1	67'6	44'9	—
7	Mostly clear till 21 <sup>h</sup> ; remainder clouded; cir-cum., cum-strat., and haze	0'0	0'0	0'0	0'0	56'4	49'7	—
8	Generally clouded; cir-cum., cum-strat., and haze	0'4	0'6	0'0	1'0	63'5	47'9	—
9	Mostly clouded till 3 <sup>h</sup> ; cir-cum. and haze; remainder clear	0'2	1'0	1'0	0'6	68'3	47'7	—
10	Mostly clear; light cir-strat. in horizon	0'7	0'0	—	—	74'0	57'5	—
11	Mostly clear till 21 <sup>h</sup> ; light cir-strat. in horizon; remainder clouded; cir-cum. and cir-strat.	—	—	0'0	0'0	71'4	50'2	—
12	Mostly clear till 21 <sup>h</sup> ; light cir-strat. in horizon; remainder clouded; cir-cum. and cir-strat.	0'4	0'1	0'0	0'0	63'8	39'9	—
13	Mostly clouded till 9 <sup>h</sup> ; cir-cum. and cir-strat.; remainder of day clear	0'0	0'7	0'3	1'0	56'6	37'4	—
14	Quite clear	0'8	1'0	0'0	0'0	62'7	39'7	—
15	Clear till 16 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0'0	0'0	0'0	0'0	67'6	49'7	—
16	Clouded; cir-cum. and haze; distant thunder at 3 <sup>h</sup>	0'0	0'0	0'0	1'0	92'0	65'8	—
17	Generally clouded; cir. and haze; sheet lightning in W. at 9 <sup>h</sup>	1'0	1'0	—	—	87'8	59'0	—
18	Mostly clear	—	—	0'0	1'0	82'2	61'0	—
19	Generally clouded; cir-cum. and cum-strat.; some heavy thunder showers	1'0	1'0	0'8	0'5	76'0	64'0	—
20	Mostly clouded; cir-cum. and cum-strat.; a few clear spaces	0'5	1'0	0'0	1'0	77'6	58'5	0'38
21	Mostly clouded; cum-strat. and cir-strat.; faint auroral light in N. from 10 <sup>h</sup> to 12 <sup>h</sup> ; rain from 18 <sup>h</sup> to 21 <sup>h</sup>	0'8	1'0	0'9	0'8	73'6	52'0	—
22	Clouded till 8 <sup>h</sup> ; cir-cum. and cum-strat.; remainder of day clear	0'4	1'0	1'0	1'0	71'2	51'5	0'13
23	Generally clear	0'7	0'0	0'0	0'0	71'2	59'2	—
24	Mostly clouded; cir-cum., cir-strat., and haze until 11 <sup>h</sup> ; remainder mostly clear	0'1	0'0	—	—	77'4	51'5	—
25	Clouded; cum., cum-strat., and haze; thunder, lightning, and slight rain from 6 <sup>h</sup> to 12 <sup>h</sup> , and from 17 <sup>h</sup> to 22 <sup>h</sup>	—	—	0'1	0'8	73'6	44'7	—
26	Mostly clear till 9 <sup>h</sup> ; sheet lightning and some slight rain from 8 <sup>h</sup> to 12 <sup>h</sup> ; remainder of day clouded; cir-cum. and cum-strat.	1'0	0'8	0'0	0'6	76'2	56'0	—
27	Generally clouded; cir-strat. and cir-cum.	1'0	1'0	1'0	1'0	82'0	55'7	0'24
28	Mostly clouded till 8 <sup>h</sup> ; cir-cum. and cir-strat.; remainder of day quite clear	0'9	0'8	0'9	0'1	77'4	61'4	—
29	Partially clear till 9 <sup>h</sup> ; sheet lightning and some slight rain from 8 <sup>h</sup> to 12 <sup>h</sup> ; remainder of day clouded; cir-cum. and cum-strat.	1'0	0'0	0'0	0'0	71'8	53'7	—
30	Mostly clear; auroral light in N. from 9 <sup>h</sup> to 12 <sup>h</sup>	0'3	1'0	0'3	1'0	75'6	50'0	0'05

	Max. Therm.	Min. Therm.	Rain.
21			
0	52.6	33.4	0.11
07	49.1	34.6	—
00	53.7	37.5	—
00	64.2	40.1	—
08	58.4	43.7	0.03
—	70.6	47.1	—
10	71.8	47.7	0.09
02	68.2	46.7	—
02	57.1	39.2	0.22
10	62.0	32.9	0.15
00	55.0	15.5	0.15
10	51.4	41.2	—
—	51.0	31.3	0.44
06	47.8	39.0	—
10	56.4	32.5	0.23
05	57.2	46.1	—
00	59.1	35.2	—
10	64.6	43.7	—
09	72.9	48.6	0.28
—	74.7	55.5	0.26
10	75.6	56.5	0.18
10	60.6	57.8	—
07	61.8	51.9	0.15
10	59.6	53.5	—
00	73.8	50.3	—
01	78.0	46.5	—
—	66.8	46.7	—
10	66.6	47.2	0.11
00	70.1	52.5	—
03	75.6	47.7	—
06	67.3	41.3	—

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	15 <sup>b</sup>	21			
<b>JULY.</b>								
0	Clear	0.0	0.0	—	—	78.0	51.5	—
2	Generally clouded; cir-strat. and haze; some rain and occasional thunder	—	—	1.0	1.0	66.6	45.4	0.16
3	Mostly clouded till 3 <sup>h</sup> ; cir-cum. and cum.; remainder clear; aurora at 10 <sup>h</sup> and 11 <sup>h</sup>	0.5	0.2	0.0	0.0	61.6	51.9	—
4	Clouded till 1 <sup>h</sup> ; cir., cir-cum., and haze; remainder mostly clear; aurora from 10 <sup>h</sup> to 12 <sup>h</sup>	0.8	0.0	0.0	0.6	70.7	49.1	—
5	Clear	0.2	0.0	0.1	0.0	70.6	44.4	—
6	Mostly clouded; cir-cum. and cir-strat.	0.8	1.0	0.8	0.8	72.3	48.7	—
7	Mostly clouded; cir-cum. and cir-strat.	0.8	0.5	0.9	1.0	72.0	58.0	—
8	Clouded; cir-strat., cir-cum., and haze	1.0	1.0	—	—	66.2	57.0	—
9	—	—	—	1.0	1.0	60.4	55.9	—
10	Generally clouded; cir-cum., cum-strat., cir-strat.; showers of rain, with thunder and lightning	0.9	0.2	1.0	1.0	64.9	58.2	0.28
11	Mostly clouded; cir-cum. and cir-strat.; brilliant aurora from 9 <sup>h</sup> to 11 <sup>h</sup>	0.8	0.7	1.0	1.0	69.5	61.2	—
12	Mostly clouded; cir-cum. and cum-strat.; distant thunder; some slight rain	1.0	0.7	0.7	0.1	75.1	61.5	—
13	Nearly clear; some slight cir-cum. and cir-strat. round horizon	0.3	0.1	0.1	0.2	76.8	59.7	—
14	Mostly clouded till 1 <sup>h</sup> ; cir-cum. and cir-strat.; showers; remainder clear	0.7	0.0	0.0	0.6	82.2	61.2	0.14
15	Partially clouded; cir-cum. and cum.	0.6	0.2	—	—	80.9	57.4	—
16	—	—	—	0.0	0.9	74.2	52.7	—
17	Clouded till 11 <sup>h</sup> ; cir-strat., cir-cum., and haze; showers; sheet lightning; lunar rainbow at 15 <sup>h</sup> 20'; perfect	0.9	0.6	0.1	0.3	61.7	45.7	0.28
18	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> ; remainder partly clouded; cir-cum. and cum-strat.	0.8	0.0	0.5	0.6	72.2	49.2	—
19	Mostly clouded; cir-cum. and cir-strat.; remainder nearly clear	1.0	0.0	0.3	0.7	78.5	57.5	—
20	Mostly clouded; cir-cum., cir-strat., and haze	0.7	1.0	1.0	1.0	79.2	57.1	—
21	Clouded; cir-cum. and cir-strat.; showers during the day; steady rain from 12 <sup>h</sup> to 17 <sup>h</sup>	1.0	0.9	1.0	1.0	81.5	63.3	0.23
22	—	1.0	0.2	—	—	77.1	61.7	0.08
23	Mostly clouded till 17 <sup>h</sup> ; cir-strat. and haze; remainder clear; showers of rain from 8 <sup>h</sup> to 9 <sup>h</sup>	—	—	0.7	0.0	69.0	57.7	0.12
24	Clouded; cir-cum. and cir-strat.; slight rain during the night	0.8	1.0	1.0	1.0	72.4	55.0	0.29
25	Mostly clouded; cir-cum. and haze	0.7	0.4	0.7	0.9	75.0	60.6	—
26	Mostly clouded; cir-strat. and haze; sheet lightning at 10 <sup>h</sup> and 11 <sup>h</sup>	0.8	1.0	1.0	1.0	75.4	54.2	0.05
27	Mostly clear	0.2	0.1	1.0	0.4	72.8	61.3	—
28	Partially clouded, with cir-cum. and cum-strat.	0.3	0.4	1.0	0.6	76.2	51.7	—
29	Partially clouded; cir-strat. and cir-cum.	0.3	0.0	—	—	76.1	51.7	—
30	—	—	—	1.0	0.7	73.6	49.9	—
31	Mostly clouded till 9 <sup>h</sup> ; cir-cum. and cir-strat.; remainder clear; showers of rain; sheet lightning at night	0.6	0.9	0.0	0.1	72.8	65.6	0.18
<b>AUGUST.</b>								
1	Mostly clear; some light cum. and cir-cum. occasionally	0.5	0.0	1.0	0.0	73.6	52.2	—
2	Mostly clouded; cir-strat. and haze	0.7	0.7	1.0	1.0	73.1	49.7	—
3	Clouded all day; cir., cir-strat., and haze; halo round the sun, diameter about 25', at 3 <sup>h</sup> ; showers during the night	1.0	1.0	1.0	1.0	77.2	52.5	0.23
4	Mostly clouded; cir-cum., cir-strat., and haze; showers between 6 <sup>h</sup> and 7 <sup>h</sup>	1.0	1.0	0.6	1.0	73.7	63.3	0.31
5	—	0.8	0.6	—	—	71.8	64.0	—
6	Partially clear; cir-cum. and haze general	—	—	0.1	0.0	71.8	51.8	—
7	Clear; mist at night	0.0	0.0	0.0	0.0	71.2	48.7	—
8	Mostly clear; aurora at night from 9 <sup>h</sup> to 11 <sup>h</sup>	0.0	0.1	0.7	0.0	75.7	48.9	—
9	Mostly clear; misty at 16 <sup>h</sup> and 17 <sup>h</sup>	0.4	0.0	0.0	0.0	79.1	53.0	—
10	Mostly clear; some light cir-cum. occasionally	0.2	0.1	0.2	0.7	83.0	58.8	—
11	Mostly clouded; cir-strat. and cir-cum.; distant thunder in N.W. at 4 <sup>h</sup> ; slight rain between 6 <sup>h</sup> and 7 <sup>h</sup>	0.9	0.8	0.7	0.5	84.9	61.1	—
12	—	0.2	0.7	—	—	81.4	63.3	—
13	Mostly clear; some cum. and cir-cum.	—	—	0.5	0.3	81.2	65.5	—
14	Mostly clear; some light cir. and cir-strat.; lightning in W. and N.W. at 9 <sup>h</sup>	0.3	0.1	0.4	1.0	80.0	63.2	—
15	Clouded; cir-cum. and cir-strat.	1.0	1.0	1.0	1.0	87.0	68.0	—
16	Clouded; cir-cum., cir-strat., and haze; some slight rain and distant thunder during the day; rain at night	1.0	1.0	1.0	1.0	78.6	68.2	0.07
17	Clouded; cum-strat. and cir-cum.	1.0	1.0	1.0	0.5	77.8	62.5	—
18	Mostly clouded till 3 <sup>h</sup> ; cum-strat. and cir-cum.; remainder clear	0.8	0.1	0.0	0.0	66.0	59.8	—
19	—	0.2	0.0	—	—	74.0	56.2	—
20	Generally clear till 9 <sup>h</sup> ; remainder clouded; cir. and haze	—	—	1.0	1.0	74.8	51.9	—
21	Clear; aurora from 9 <sup>h</sup> to 11 <sup>h</sup>	0.4	0.0	0.0	0.1	73.1	55.5	—
22	Partially clouded; cir-strat. and haze	0.6	0.4	0.8	0.3	71.4	53.6	—
23	Generally clouded; cir-strat., cir., and cum-strat.; some rain during the night	0.4	0.6	1.0	0.9	73.8	59.1	—
24	Generally clouded; cir-cum. and cir-strat.; halo round the sun at 21 <sup>h</sup> and 22 <sup>h</sup> , diam. 40', perfect	0.7	0.9	1.0	1.0	75.8	61.5	—
25	Mostly clouded; cir-strat. and haze	0.6	0.5	0.0	0.7	74.4	69.0	—
26	Mostly clear; very bright perfect halo round the sun at 1 <sup>h</sup> 30' of the 27th, diameter about 40'; sky hazy; sun shining dimly	0.0	0.0	—	—	75.4	58.5	—
27	—	—	—	1.0	1.0	75.0	57.4	—
28	Clouded till 4 <sup>h</sup> ; cir-strat., cir-cum., and haze; thunder in S.W. and N.W. at 2 <sup>h</sup> and 3 <sup>h</sup> ; aurora from 10 <sup>h</sup> to 11 <sup>h</sup>	1.0	0.2	0.0	0.0	72.6	66.9	—
29	Clear all day	0.1	0.0	0.0	0.0	78.4	54.5	—
30	Generally clear till 17 <sup>h</sup> ; remainder clouded; cir-cum. and cir-strat.	0.3	0.2	0.1	1.0	76.4	53.7	—
31	Clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; remainder clouded; cir-cum. and cir-strat.	1.0	0.0	1.0	0.8	79.0	59.1	—

\* In the last column under the head of Clouded Sky the 15<sup>b</sup> has been substituted for the 15<sup>h</sup>, commencing with the new system of observation on 1st July, 1848.



Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	17	21			
<b>SEPTEMBER.</b>								
D.								In.
1	Generally a few clear spaces till 6 <sup>h</sup> ; remainder clouded; cir-cum. and cir-strat.	0 <sup>9</sup>	0 <sup>9</sup>	0 <sup>7</sup>	1 <sup>0</sup>	76 <sup>7</sup>	62 <sup>6</sup>	—
2	Clear till 9 <sup>h</sup> ; remainder clouded; cum. and cir-cum.	0 <sup>3</sup>	0 <sup>0</sup>	—	—	71 <sup>0</sup>	58 <sup>0</sup>	—
3		—	—	1 <sup>0</sup>	0 <sup>9</sup>	73 <sup>1</sup>	51 <sup>0</sup>	—
4		Mostly clear from 0 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cir-cum. and haze; aurora at 10 <sup>h</sup>	0 <sup>3</sup>	0 <sup>0</sup>	0 <sup>9</sup>	0 <sup>8</sup>	77 <sup>1</sup>	59 <sup>2</sup>
5	Quite clear	0 <sup>1</sup>	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>0</sup>	80 <sup>4</sup>	58 <sup>5</sup>	—
6	Generally clear	0 <sup>2</sup>	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>0</sup>	73 <sup>4</sup>	48 <sup>2</sup>	—
7	Quite clear	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>1</sup>	68 <sup>0</sup>	40 <sup>1</sup>	—
8	Clouded from 0 <sup>h</sup> to 4 <sup>h</sup> , and at 21 <sup>h</sup> ; cir-cum. and cir-strat.; remainder clear	1 <sup>0</sup>	0 <sup>0</sup>	0 <sup>3</sup>	0 <sup>9</sup>	68 <sup>0</sup>	49 <sup>7</sup>	—
9	Clear at 4 <sup>h</sup> and 15 <sup>h</sup> ; remainder mostly clouded; cir-cum. and cir-strat.; lightning, thunder, and rain during the night	0 <sup>7</sup>	0 <sup>0</sup>	—	—	73 <sup>8</sup>	45 <sup>6</sup>	—
10	Clouded; cir-cum. and cir-strat.; thunder, lightning, and showers of rain during the day and night	—	—	0 <sup>6</sup>	1 <sup>0</sup>	65 <sup>0</sup>	48 <sup>7</sup>	0 <sup>14</sup>
11		1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>8</sup>	69 <sup>2</sup>	51 <sup>7</sup>	0 <sup>21</sup>
12	Mostly clouded till 3 <sup>h</sup> ; cir-cum. and cir-strat.; remainder clear	0 <sup>6</sup>	0 <sup>1</sup>	0 <sup>0</sup>	0 <sup>1</sup>	65 <sup>4</sup>	48 <sup>9</sup>	—
13	Generally clear till 4 <sup>h</sup> ; remainder clouded; cir-cum. and haze; commenced rain at 12 <sup>h</sup> ; halo round the sun at 4 <sup>h</sup> , diameter 10 <sup>0</sup> , perfect; halo round the moon at 9 <sup>h</sup> , 10 <sup>h</sup> , and 11 <sup>h</sup> , diameter 40 <sup>0</sup> , perfect	0 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	59 <sup>6</sup>	37 <sup>2</sup>	—
14	Clouded all day; rain at intervals, accompanied by lightning and thunder	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	60 <sup>4</sup>	47 <sup>0</sup>	1 <sup>00</sup>
15	Clouded till 2 <sup>h</sup> ; cir-cum. and cum-strat.; remainder clear; boards white with frost	0 <sup>4</sup>	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>0</sup>	58 <sup>3</sup>	50 <sup>2</sup>	—
16	Mostly clear till 3 <sup>h</sup> ; remainder clouded; cir-cum. and haze; rain	0 <sup>1</sup>	1 <sup>0</sup>	—	—	57 <sup>4</sup>	35 <sup>1</sup>	—
17		—	—	1 <sup>0</sup>	1 <sup>0</sup>	55 <sup>1</sup>	46 <sup>7</sup>	0 <sup>62</sup>
18	Clouded all day	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>9</sup>	60 <sup>7</sup>	52 <sup>4</sup>	—
19	Clouded all day; cir-cum. and cir-strat.; constant rain most of the day	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	61 <sup>9</sup>	50 <sup>7</sup>	0 <sup>20</sup>
20	Mostly clouded; cir-cum. and cir-strat.; some rain; aurora at 9 <sup>h</sup>	0 <sup>6</sup>	0 <sup>6</sup>	1 <sup>0</sup>	0 <sup>4</sup>	63 <sup>8</sup>	51 <sup>7</sup>	0 <sup>22</sup>
21	Partially clear; cir-cum. general; some showers of rain; hoar frost	0 <sup>9</sup>	0 <sup>5</sup>	0 <sup>2</sup>	0 <sup>0</sup>	59 <sup>4</sup>	40 <sup>7</sup>	0 <sup>05</sup>
22	Generally clear	0 <sup>3</sup>	0 <sup>0</sup>	0 <sup>1</sup>	0 <sup>2</sup>	52 <sup>4</sup>	36 <sup>2</sup>	—
23	Mostly clear; some cir-cum. detached	0 <sup>4</sup>	0 <sup>2</sup>	—	—	48 <sup>2</sup>	30 <sup>9</sup>	—
24		—	—	0 <sup>9</sup>	0 <sup>9</sup>	60 <sup>8</sup>	46 <sup>8</sup>	—
25	Partially clouded till 2 <sup>h</sup> ; cir-cum. and cum-strat.; remainder mostly clear	0 <sup>5</sup>	0 <sup>0</sup>	0 <sup>1</sup>	0 <sup>4</sup>	55 <sup>8</sup>	42 <sup>3</sup>	—
26	Mostly clear	0 <sup>2</sup>	0 <sup>1</sup>	0 <sup>0</sup>	0 <sup>1</sup>	59 <sup>8</sup>	30 <sup>2</sup>	—
27	Clouded; cir-strat. cir-cum. and haze	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>6</sup>	1 <sup>0</sup>	47 <sup>9</sup>	28 <sup>1</sup>	—
28	Clouded; cum-strat. and cir-cum.; slight rain	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	54 <sup>4</sup>	31 <sup>0</sup>	0 <sup>50</sup>
29	Generally clouded; cir-cum. and cir-strat.; aurora from 9 <sup>h</sup> to 11 <sup>h</sup> ; rain	1 <sup>0</sup>	0 <sup>5</sup>	1 <sup>0</sup>	0 <sup>7</sup>	51 <sup>0</sup>	41 <sup>3</sup>	0 <sup>16</sup>
30	Mostly clouded; cir-cum. cir-strat. and haze; aurora from 9 <sup>h</sup> to 11 <sup>h</sup>	0 <sup>7</sup>	0 <sup>6</sup>	—	—	59 <sup>0</sup>	35 <sup>2</sup>	—
<b>OCTOBER.</b>								
1	Generally overcast; cir-cum. and cir-strat.	—	—	1 <sup>0</sup>	1 <sup>0</sup>	49 <sup>0</sup>	39 <sup>2</sup>	—
2	Clouded; cir-strat. and haze; slight rain from 0 <sup>h</sup> to 9 <sup>h</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	49 <sup>3</sup>	41 <sup>1</sup>	0 <sup>23</sup>
3	Mostly clouded; cir-strat. and haze	0 <sup>8</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	51 <sup>8</sup>	47 <sup>7</sup>	—
4	Clouded; cir-cum. cir-strat. and haze	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	57 <sup>8</sup>	51 <sup>5</sup>	—
5	Mostly clouded; cir-cum. cir-strat. and haze	1 <sup>0</sup>	0 <sup>2</sup>	1 <sup>0</sup>	1 <sup>0</sup>	58 <sup>5</sup>	46 <sup>7</sup>	—
6	Densely clouded all day; cir-cum. cir-strat. and haze	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	57 <sup>7</sup>	41 <sup>5</sup>	—
7	Mostly clouded; cir-cum. cir-strat. and haze; rain from 5 <sup>h</sup> to 8 <sup>h</sup>	1 <sup>0</sup>	1 <sup>0</sup>	—	—	52 <sup>0</sup>	46 <sup>6</sup>	0 <sup>22</sup>
8	Partially clouded; cir-cum. and cum-strat.; aurora at night	—	—	0 <sup>5</sup>	0 <sup>0</sup>	61 <sup>0</sup>	40 <sup>2</sup>	—
9	Clear till 1 <sup>h</sup> ; remainder clouded; cir-cum. cum-strat. and haze	0 <sup>0</sup>	1 <sup>0</sup>	0 <sup>8</sup>	0 <sup>4</sup>	50 <sup>0</sup>	31 <sup>3</sup>	—
10	Mostly clear	0 <sup>2</sup>	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>0</sup>	57 <sup>4</sup>	49 <sup>5</sup>	—
11	Mostly clear	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>4</sup>	0 <sup>0</sup>	51 <sup>6</sup>	24 <sup>5</sup>	—
12	Mostly clear	0 <sup>0</sup>	0 <sup>0</sup>	1 <sup>0</sup>	0 <sup>1</sup>	48 <sup>4</sup>	31 <sup>1</sup>	—
13	Partially clouded; cir-cum. and cir-strat.	0 <sup>8</sup>	0 <sup>4</sup>	0 <sup>1</sup>	1 <sup>0</sup>	59 <sup>0</sup>	39 <sup>5</sup>	—
14	Clouded till 3 <sup>h</sup> ; with cir-cum. and cir-strat.; remainder of day clear	0 <sup>6</sup>	0 <sup>0</sup>	—	—	48 <sup>0</sup>	33 <sup>9</sup>	—
15	Quite clear till 4 <sup>h</sup> ; remainder clouded; cir-cum. cir-strat. and haze	—	—	0 <sup>0</sup>	1 <sup>0</sup>	61 <sup>0</sup>	36 <sup>7</sup>	—
16	Clouded all day; cir-cum. cir-strat. and haze; slight rain from 6 <sup>h</sup> to 10 <sup>h</sup> , and some during the night	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	58 <sup>6</sup>	46 <sup>5</sup>	0 <sup>29</sup>
17	Clouded all day; cum-strat. cir-strat. cir-cum. and haze; auroral light through the clouds at night	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	61 <sup>8</sup>	36 <sup>7</sup>	—
18	Clouded all day; cir-strat. and haze	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	39 <sup>4</sup>	30 <sup>2</sup>	—
19	Clouded all day; cir-cum. cir-strat. and haze	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	36 <sup>6</sup>	31 <sup>8</sup>	—
20	Mostly clouded; cir-strat. cir-cum. and haze	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>9</sup>	0 <sup>2</sup>	41 <sup>0</sup>	39 <sup>7</sup>	—
21	Mostly clouded; cir-cum. cir-strat. and cum-strat.	1 <sup>0</sup>	0 <sup>4</sup>	—	—	46 <sup>5</sup>	36 <sup>2</sup>	—
22	Mostly clouded; cir-cum. cir-strat. and cum-strat.	—	—	1 <sup>0</sup>	0 <sup>5</sup>	47 <sup>5</sup>	26 <sup>7</sup>	—
23	Mostly clouded; cir-cum. cir-strat. and haze; aurora at 9 <sup>h</sup>	0 <sup>8</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	45 <sup>0</sup>	31 <sup>0</sup>	—
24	Mostly clouded; cir-cum. and cum-strat.; rain	0 <sup>9</sup>	0 <sup>4</sup>	0 <sup>3</sup>	0 <sup>2</sup>	46 <sup>5</sup>	40 <sup>7</sup>	0 <sup>27</sup>
25	Mostly clouded; cir-strat. and haze; aurora from 9 <sup>h</sup> to 12 <sup>h</sup> ; rain from 15 <sup>h</sup> to 17 <sup>h</sup>	0 <sup>9</sup>	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>8</sup>	51 <sup>7</sup>	35 <sup>6</sup>	0 <sup>06</sup>
26	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded; cir-cum. and cum-strat.	1 <sup>0</sup>	0 <sup>0</sup>	1 <sup>0</sup>	0 <sup>0</sup>	51 <sup>0</sup>	37 <sup>9</sup>	—
27	Clear till 6 <sup>h</sup> ; remainder clouded; cir-strat. and haze	0 <sup>0</sup>	0 <sup>0</sup>	0 <sup>0</sup>	1 <sup>0</sup>	47 <sup>0</sup>	24 <sup>8</sup>	—
28	Clouded all day; cir-strat. and haze	1 <sup>0</sup>	1 <sup>0</sup>	—	—	51 <sup>2</sup>	38 <sup>2</sup>	—
29	Clouded till 17 <sup>h</sup> ; cir-cum. and haze; slight rain occasionally; remainder of day clear	—	—	1 <sup>0</sup>	0 <sup>0</sup>	51 <sup>8</sup>	49 <sup>7</sup>	0 <sup>14</sup>
30	Clouded; cir-cum. and cir-strat.; rain from 9 <sup>h</sup> to 17 <sup>h</sup>	1 <sup>0</sup>	1 <sup>0</sup>	1 <sup>0</sup>	0 <sup>5</sup>	54 <sup>4</sup>	45 <sup>9</sup>	0 <sup>25</sup>
31	Partially clouded; cir-cum. and cir-strat.; auroral light in N. from 9 <sup>h</sup> to 11 <sup>h</sup> ; rain	0 <sup>7</sup>	0 <sup>2</sup>	0 <sup>3</sup>	0 <sup>1</sup>	54 <sup>2</sup>	44 <sup>0</sup>	0 <sup>11</sup>

Max. Therm.	Min. Therm.	Rain.
76°7	62°6	—
71°0	58°0	—
73°4	51°0	—
77°4	59°2	—
80°4	58°5	—
73°4	48°2	—
68°0	40°4	—
68°0	49°7	—
73°8	45°6	—
65°0	38°7	0°14
69°2	51°7	0°21
65°4	48°9	—
59°6	37°2	—
60°4	47°0	1°00
58°3	50°2	—
57°4	35°4	—
55°4	46°7	0°62
60°7	52°4	—
61°9	50°7	0°20
63°8	51°7	0°22
59°4	40°7	0°07
52°4	36°2	—
48°2	30°9	—
60°8	46°8	—
55°8	42°3	—
59°8	30°2	—
47°9	28°4	—
54°4	31°0	0°50
51°0	41°3	0°16
59°0	35°2	—
49°0	39°2	—
49°3	11°1	0°23
51°8	47°7	—
57°8	51°5	—
58°5	46°7	—
57°7	41°5	—
52°0	46°6	0°22
61°0	40°2	—
50°0	31°3	—
57°4	49°5	—
54°6	24°5	—
48°4	34°1	—
59°0	39°5	—
48°0	33°9	—
61°0	36°7	—
58°6	46°5	0°20
61°8	36°7	—
39°4	30°2	—
36°6	34°8	—
44°0	39°7	—
46°5	36°2	—
47°5	26°7	—
45°0	31°0	—
46°5	30°7	0°27
51°7	35°6	0°08
51°0	37°9	—
47°0	24°8	—
51°2	38°2	—
51°8	49°7	0°14
54°4	45°9	0°25
54°2	44°0	0°11

Toronto Mean Time.	Weather and Phenomena.	Extent of Cloudy Sky.				Max. Therm.	Min. Therm.	Rain.
		3	9	17	21			
<b>NOVEMBER.</b>								
1	Mostly clear; some cum-strat. and cir-strat. round horizon	0°4	0°1	0°1	0°1	46°6	37°8	—
2	Nearly clear at 9 <sup>h</sup> ; remainder clouded; cum-strat., cir-cum., and cir-strat.	1°0	0°4	1°0	1°0	41°3	31°9	—
3	Clouded; cir-cum., cir-strat., and haze	1°0	1°0	1°0	1°0	38°9	31°6	—
4	Clouded; cir-cum., cum-strat., and haze; rain till 17 <sup>h</sup>	1°0	1°0	—	—	43°2	39°2	0°41
5	Mostly clouded; cir-cum. and cum-strat.	—	—	1°0	1°0	49°0	35°7	—
6	Mostly clouded; cir-strat. and haze	0°3	0°9	1°0	1°0	40°0	32°3	—
7	Mostly clouded; cir-strat. and haze; some particles of snow	0°9	0°3	0°8	1°0	42°0	26°9	—
8	Mostly clouded till 9 <sup>h</sup> ; cir-strat. and haze; remainder clear; some snow from 6 <sup>h</sup> to 9 <sup>h</sup>	1°0	1°0	0°1	0°0	35°7	21°8	—
9	Mostly clouded; cir-strat. and haze	0°8	0°0	1°0	1°0	33°6	20°4	—
10	Clouded all day; cir-strat. and haze; some faint auroral light at 11 <sup>h</sup>	1°0	1°0	1°0	1°0	28°0	15°9	—
11	Clouded all day; cir-cum. and cir-strat.; some slight snow	1°0	1°0	—	—	29°4	25°4	—
12	Clouded all day; cir-strat. and haze	—	—	1°0	1°0	31°6	25°2	—
13	Clouded all day; cir-strat. and haze; some very slight snow at 11 <sup>h</sup>	1°0	1°0	1°0	1°0	27°6	25°5	—
14	Clouded all day; cir-cum. and haze; slight rain at 10 <sup>h</sup> and 11 <sup>h</sup>	1°0	1°0	1°0	1°0	34°5	31°9	0°03
15	Clear at 9 <sup>h</sup> and 10 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0°9	1°0	0°0	1°0	40°6	33°2	—
16	Clouded till 4 <sup>h</sup> ; remainder partly clear; cir-cum. and haze; auroral light from 10 <sup>h</sup>	1°0	0°4	0°2	0°7	39°2	35°4	—
17	Mostly clouded; cir-cum. and cir-strat.; very brilliant aurora at night	1°0	1°0	1°0	0°4	43°2	28°7	—
18	Mostly clouded; cir-cum. and cum-strat.; some slight appearance of aurora at night	1°0	0°4	—	—	37°7	26°1	—
19	Clouded all day; some slight auroral light at night	—	—	1°0	1°0	33°4	26°5	—
20	Mostly clear	0°0	0°0	0°6	1°0	33°0	30°2	—
21	Generally clear; aurora from 7 <sup>h</sup> to 11 <sup>h</sup> ; moderately bright	0°4	0°0	0°0	0°2	38°8	21°7	—
22	Clouded from 2 <sup>h</sup> to 10 <sup>h</sup> , and at 21 <sup>h</sup> ; cir-cum. and cir-strat.; remainder mostly clear; faint auroral light from 9 <sup>h</sup> to 11 <sup>h</sup>	1°0	0°9	0°0	1°0	41°1	27°7	—
23	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cir-strat., cir-cum., and haze; faint auroral light at 11 <sup>h</sup>	0°9	0°0	1°0	1°0	40°8	26°9	—
24	Clouded all day; cir-cum., cir-strat., and haze; constant light rain till 8 <sup>h</sup>	1°0	1°0	1°0	1°0	43°0	29°8	0°89
25	Clouded all day; cir-cum. and cum-strat.; rain and sleet till 4 <sup>h</sup>	1°0	1°0	—	—	41°6	32°7	0°25
26	Clouded all day; cir-cum. and cum-strat.; aurora from 10 <sup>h</sup> to 12 <sup>h</sup>	—	—	1°0	1°0	38°1	28°7	—
27	Mostly clouded; cir-strat. and cir-cum.; faint auroral light at night	0°7	0°4	1°0	1°0	30°8	20°6	—
28	Mostly clouded; cum-strat. and cir-strat.	0°5	0°9	1°0	1°0	32°4	29°7	—
29	Clouded; cir-strat. and haze; rain from 2 <sup>h</sup> to 11 <sup>h</sup> ; heavy squall of wind at 16 <sup>h</sup> ; wind continuing high	1°0	1°0	1°0	1°0	41°0	35°7	0°45
30	Clouded all day; cir-cum. and haze	1°0	1°0	1°0	1°0	41°4	29°5	—
<b>DECEMBER.</b>								
1	Clouded all day; cir-cum. and cum-strat.; snow from 3 <sup>h</sup> to 9 <sup>h</sup> ; turned to rain	1°0	1°0	1°0	0°9	38°0	23°7	0°50
2	Mostly clouded; cir-cum. and cum-strat.; rain	0°8	0°6	—	—	39°5	22°2	0°78
3	Clouded; cir-cum., cum-strat., and haze	—	—	1°0	1°0	40°4	33°2	—
4	Clouded; cir-cum., cir-strat., and haze; slight snow at 17 <sup>h</sup>	1°0	1°0	1°0	1°0	38°5	28°9	—
5	Clouded; cir-cum., cir-strat., and haze; snow at intervals	1°0	1°0	1°0	1°0	38°0	28°9	—
6	Clouded; cir-strat. and haze; drizzling rain, freezing as it falls from 2 <sup>h</sup>	1°0	1°0	1°0	1°0	31°4	26°2	0°25
7	Clouded; cir-cum. and haze; drizzling most of the day	1°0	1°0	1°0	0°8	29°0	26°2	0°39
8	Partly clear; cir-cum. and cir-strat. general	0°0	1°0	0°2	1°0	35°0	30°7	—
9	Clouded; cir-strat. and haze; sleet and rain from 9 <sup>h</sup>	1°0	1°0	—	—	38°8	27°7	0°25
10	Mostly clouded; some rain	—	—	1°0	1°0	31°4	31°8	0°35
11	Clouded; cum-strat.	1°0	1°0	1°0	1°0	46°6	26°2	—
12	Mostly clouded; cir-strat., cum-strat., and haze	1°0	1°0	0°4	0°7	30°4	23°5	—
13	Mostly clear; cum-strat. round horizon	0°0	0°3	0°2	0°8	30°6	22°2	—
14	Clear from 2 <sup>h</sup> to 4 <sup>h</sup> ; remainder clouded; cir-cum. and haze	0°0	1°0	0°8	0°1	31°2	27°7	—
15	Clouded from 10 <sup>h</sup> to 21 <sup>h</sup> ; cir-cum. and cir-strat.; remainder clear; slight snow at 19 <sup>h</sup>	0°0	0°0	1°0	1°0	42°0	32°2	—
16	Mostly clouded; cir-cum. and cum-strat.	0°9	0°9	—	—	35°6	27°5	—
17	Clouded; cir-strat. and haze	—	—	1°0	1°0	43°9	32°7	—
18	Clouded; cir-cum. and cum-strat.; faint appearance of auroral light at 10 <sup>h</sup> and 11 <sup>h</sup>	1°0	0°9	1°0	1°0	38°0	31°7	—
19	Clouded; dense; cir-cum. and haze	0°4	1°0	1°0	1°0	41°7	32°7	—
20	Clouded; cir. and haze	1°0	1°0	1°0	1°0	48°6	21°9	—
21	Clouded; dense; haze; snowing and drift	1°0	1°0	1°0	1°0	29°0	19°3	—
22	Mostly clouded; cir-cum. and haze; snowing and drift till 3 <sup>h</sup>	1°0	1°0	0°6	1°0	20°6	8°1	—
23	Mostly clouded; cir-cum. and cir-strat.; some slight snow from 19 <sup>h</sup> , which turned to rain at 21 <sup>h</sup>	0°9	1°0	—	—	42°8	1°1	—
24	Clouded; cir-cum. and haze; rain, which ceased at 2 <sup>h</sup>	—	—	1°0	1°0	25°6	18°0	0°24
25	Clouded; cir-cum. and cum-strat.	1°0	1°0	—	—	33°0	23°6	—
26	Mostly clouded; cir-cum. and cum-strat.	1°0	0°6	1°0	1°0	36°6	21°0	—
27	Clouded till 11 <sup>h</sup> ; cir-cum. and cir-strat.; snow from 6 <sup>h</sup> to 10 <sup>h</sup> ; cleared up	1°0	1°0	0°0	0°0	24°3	15°5	—
28	Clear till 3 <sup>h</sup> ; remainder clouded; cir-cum. and cir-strat.	0°0	1°0	0°6	1°0	33°4	15°7	—
29	Mostly clouded; cir-cum. and haze; clear at 17 <sup>h</sup>	0°8	0°4	0°0	0°4	30°6	27°5	—
30	Clear from 2 <sup>h</sup> to 3 <sup>h</sup> ; remainder clouded; cir-strat. and cum-strat.	0°0	1°0	—	—	34°2	11°4	—
31	Mostly clouded; cir-strat. and cum-strat.	—	—	0°7	0°6	31°7	15°7	—

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